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THE

CINCINNATI

MEDICAL NEWS.

EDITED BY

J. A. THACKER, A. M., M. D.

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CINCINNATI, OHIO:

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THE
CINCINNATI MEDICAL NEWS.

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ORIGINAL CONTRIBUTIONS.

Posture in the Treatment of Intestinal Colic and Ileus; With a Consideration of the Pathology of "Spasmodic Colic:"

Being the Supplement to a Paper Read before the New York Academy of Medicine, May 1, 1879.

BY FRANK H. HAMILTON, M. D.

MAY 1, 1879, I read before the New York Academy of Medicine a paper on Posture as a Means of Treatment in Strangulated and Incarcerated Hernia (subsequently published in the *Hospital Gazette* for June 9th, 1879), and which paper "was written as prefatory to the consideration of Spasmodic Colic and Ileus," for the purpose of calling attention to posture as a means of treatment in certain examples of these latter affections.

No opportunity of which I could conveniently avail myself has yet been afforded me to complete the reading of the paper before the Academy, and I have therefore thought it best to publish it, in order that those who read the first fasciculus, relating only to posture in hernia, might understand in what manner the facts there stated and the views there expressed might bear upon the treatment of colic and ileus.

Writers have spoken of several varieties of intestinal colic, such as simple spasmodic colic, bilious colic, colic from obstruction, neuralgic colic, inflammatory, rheumatic colic, lead colic, etc. These various forms of colic they have attributed to various causes, among which, as a *direct* cause, "spasm," with or without contiguous paralysis, is

made to occupy the most prominent position, and especially in the variety first mentioned.

The precise meaning which these writers attach to the word spasm, in its relation to colic, is not always clearly stated; and often they speak of it only casually, or rather as a suggestion, about which they may entertain some doubt, although they do not actually express a doubt.

Thus Dr. Austin Flint, in his Treatise on the Practice of Medicine, says the pain is of a character "supposed to indicate spasm." It might seem from this mode of stating the cause that the author saw some difficulties in the way of this theory, and that he did not regard it as proven; but when considering the subject of treatment he assumes a more positive tone, and declares that the "object of treatment is to relieve spasm as indicated by the cessation of pain. Measures are to be directed to this object without reference to the cause of the attack, or the existence of constipation." We suppose Dr. Flint to refer in this latter clause to the exciting causes, such as acrid ingesta, etc., the immediate cause being the spasm.

Wood, while offering no explanation of the precise nature and degree of spasm which may cause intestinal obstruction and colic, says of those rare cases which terminate fatally: "Death probably results from the spasmodic closure of the bowel, operating as an obstacle to the passage of the intestinal contents. It is probable that the great distention of the bowel above the contracted portion may in some measure paralyze the muscular coat, and thus act as an additional cause of constipation."

This language permits us to infer, I think, not only that spasm may in his opinion so completely close the intestinal tube as to cause death by complete obstruction, but that in a similar way, that is, by spasm resulting in complete occlusion, what he terms "simple, spasmodic colic," not ending in death, may be caused. Indeed what else can be meant by a colic giving rise to obstinate constipation, and caused by a spasm, except that the circular fibers of the intestinal tube contract upon themselves until no orifice remains through which air can pass from one portion of the gut to the other? If, however, writers have generally used the term spasm as indicating only a *moderate* constriction at certain points of the intestinal tube, or as only an increased peristaltic action, it is not

clear how either of these conditions could cause obstinate constipation or lock up the gas and other contents in circumscribed portions of the canal. Certainly it would have been better if they had given some clearer idea of what they mean when they speak of spasm as causing colic; and if we have misunderstood them it is because their language is indefinite, and we are left to an inferential construction. We infer that they mean complete spasmodic occlusion because they do not say to the contrary, and nothing short of this could produce the results frequently observed in this class of cases. In fact I am now reminded that Wood speaks even more positively as to the relations of the constipation to the spasm, when he says of simple spasmodic colic, "constipation is the result and not the cause of the spasm," p. 651. We are therefore not left in doubt as to his opinion at least.

Gross speaks of intestinal obstruction due to spasm.

Says Erichsen, speaking of intestinal obstruction: "It is of much importance to bear in mind that severe and even fatal intestinal obstruction may occur simply from spasmodic colic."

In Ziemssen's Cyclopædia of the Practice of Medicine, "spasm of the bowel" and paresis of contiguous portions are mentioned as giving rise sometimes to the phenomena of colic, but no allusion is made to the degree of spasm which may occur, nor to spasm as causing complete occlusion of the intestinal canal.

But speaking of "ileus spasmodicus, which term I understand to mean, essentially, the same thing as 'colica spasmodica' and to embrace the same pathologico-anatomical conditions," Leichtenstern says: "The idea of an ileus spasmodicus, like an icterus spasmodicus, lasted longest, even to the middle of the present century. To day the question of the existence of such an affection no longer calls for serious discussion."

This statement of Leichtenstern seems to me to imply that among the advanced medical scholars of the last half century the idea that spasm can completely occlude the intestinal canal so as to obstruct the passage of gas, and in some cases to cause death (in which cases of persistent and fatal spasm, alone, would it be termed ileus perhaps), is abandoned. But my knowledge of the literature of this subject is too limited to allow me to say that this is the real conclusion of our best pathologists and medical

scholars. But if this idea of ileus spasmodicus is abandoned it saves me much labor, or at least renders it more easy to secure attention to my own, and what I suppose to be novel views as to the immediate cause of the phenomena in many cases of so-called spasmodic colic and spasmodic ileus. Certainly if spasm is to be rejected as being an insufficient explanation, we must now find some other which is sufficient, and I am not aware that this has been done.

It must be understood that I am not seeking for the remote causes. These have been studied with diligence, so far at least as relates to some of the forms of colic, including all the forms of purely neuralgic colic, lead colic, etc., by Romberg, Kussmaul, Maier, and others, who have traced the remote causes to certain changes in the sympathetic ganglia, or to certain influences operating mainly upon the sympathetic system; or, in the case of acrid and irritating ingesta, the causes of spasmodic colic have been ascribed to reflex actions, inducing pain, partial spasm and partial paralysis, increased and diminished peristaltic action in different portions of the intestinal tube.

What we are now inquiring about is how to explain the sudden, complete obstruction of the intestinal tube in certain cases of colic accompanied with acute pain, and its equally sudden relief, followed soon by a recurrence of the same phenomena, when these phenomena are evidently not due to impacted fæces or to other palpable causes, and which phenomena have usually been designated as spasmodic colic. We are searching for the immediate cause of the obstruction in these cases.

Lest I should have misunderstood the views of Leichtenstern, and lest the opinion may not have been abandoned that these phenomena are due to spasm alone, permit me to give my own reasons briefly for supposing that they are not so caused.

I can not think that spasmodic occlusion of any portion of the intestinal tube is possible, except at its two extremities, the pylorus and anus, and possibly at the ileocæcal valve, and at the junction of the ileum with the rectum.

The circular unstriped muscular fibers are nowhere else sufficiently aggregated to render it probable that they could do anything more than to cause a very slight narrowing of the canal; and they nowhere encircle the in-

testine entirely with continuous filaments. Their function is, in connection with the longitudinal fibers, to cause a slight peristaltic action, under the influence of which, long-continued, or frequently repeated, the contents are gradually moved forwards, or in some cases backwards (antiperistalsis). They have never been employed like the sphincter ani, or the constrictor vesicæ, to obliterate the channel. They were not needed for such a purpose, and there is therefore no anatomical provision for its possible occurrence.

Nor does any one pretend, so far as I know, ever to have seen such an occurrence, either before or after death. Yet opportunities have not been wanting before death in cases in which portions of the intestines have been exposed to view during the progress of surgical operations, or in consequence of surgical accidents, which have removed large portions of the abdominal walls; and in these latter cases the conditions are the most favorable possible for the production of spasm, namely, the presence of nervous shock consequent upon the injury, and the exposure to air and other irritants. After death, in man and other animals, the peristaltic action is often, for a time, greatly increased, yet no one has observed the phenomena in question, and which Dr. Wood supposed to exist when death was caused by spasmodic colic. Intestinal strictures have been found, but no one has pretended to have seen a spasmodic stricture of the intestine either before or after death. In a few experiments which I have made upon the intestines of animals just killed, no spasmodic occlusion has been obtanied under the influence of irritants which was sufficient to prevent the passage of gas.

THE WRITER'S THEORY.

The explanation of the phenomena in question which I offer is, that in consequence of an unusual accumulation of gas in the intestinal tube, certain portions are expanded and elongated, until, under the counter pressure of the abdominal parietes, insufficient room is left for their normal repose and relative adjustment, and they become at certain points doubled upon themselves and possibly upon each other, and the sharp angular reflexions interrupt or actually occlude the passage.

The great length of the mesentery permits, in a healthy state of the bowels, a great latitude of motion to the small

intestines; and in consequence of the peristaltic action, and of changes in the form, volume and position of the abdominal cavity, these changes and actual transpositions or dislocations of the small intestines are constantly occurring; but when inflated with gas, and especially if at the same time the peristaltic action is increased by acrid ingesta, so that the natural movements of the intestinal tube are greatly exaggerated, their ready adjustment to each other is rendered difficult, and a doubling upon themselves, and sometimes perhaps upon each other, or even a slight twisting, would seem to be rendered probable, if not inevitable.

It is not improbable that this doubling of the intestinal tube is rendered more likely to happen on account of a certain amount of narrowing of the tube from spasm, and its actual dilatation in the portion of intestine immediately above, or that the presence of a small amount of hardened fæces may favor the doubling.

One ground, and possibly the chief ground for the supposition so generally entertained heretofore, that intestinal colic is in most cases due to spasm, causing an occlusion of the channel, has probably been that, if it did actually exist to the extent of causing complete occlusion, it would satisfactorily explain the symptoms usually present. In reply to this very specious argument it might be sufficient to show that the supposition was impossible; but, admitting its possibility, the theory which I have offered explains these phenomena equally well, and perhaps better than the theory of occlusion from spasm.

1. As to the Obstruction.—The doubling, slight twisting, or entanglement of the intestinal tube, is equally competent to cause an obstruction at some point as a spasm.

2. The Pain.—The pain is probably occasioned by the pressure of gas and other contents against the distended gut; and, possibly, it is increased in some cases by exalted sensibility at the seat of obstruction. Indeed, the pain must always be less or greater in proportion to the healthy or morbid sensibility of the parts involved.

3. The Paroxysmal Character of the Pain, under the theory which I have adopted, finds a ready explanation in the peristaltic action of the intestinal tube. In a normal condition peristalsis is known to be alternating, or paroxysmal, with intervals of complete rest. Under the

excitement caused by irritating ingesta, the peristaltic action is still paroxysmal, but more urgent or violent, and is, in itself, probably the direct source of those pains which, in an ordinary attack of colic, come and go at somewhat irregular intervals.

Whatever other symptoms may be present in intestinal colic, are as readily explained by the theory of doubling, twisting, or entanglement, as by the theory of spasm.

4. Evidence Drawn from Therapeutics.—Dr. Flint says, "The morbid condition in colic is supposed to be spasm. Its seat is therefore the muscular tissue of the small or large intestines. That this is the pathological character of the affection, is shown by the kind of pain, the constipation, together with the other local symptoms, and the therapeutical measures which are found to be successful." The author proceeds to insist upon the importance of subduing the spasm, especially by the use of opiates; since, "so long as the spasm continues, there is a resistance to the action of cathartics."

I do not think, admitting that Dr. Flint's therapeutics are correct, that the inference which he makes, namely, that the opium and other similar remedies, which are successfully employed by him, prove that the true pathology of the affection is a spasm, is logical; or, to say the least, I do not think this conclusion is inevitable. Since it may be that the opium merely allays the acute pains by diminishing the nervous sensibility, or arresting or diminishing the peristaltic paroxysms, and permitting the patient to have a few hours of rest, until the intestines have time and a better opportunity to gradually unfold and adjust themselves.

But opium and morphine do not always cure a "spasmodic colic." Indeed, my later experience has been that intestinal colic is most quickly and most permanently cured by a full dose of some aromatic and stimulating cathartic, such as the tincture of rhubarb with ginger. There are cases, however, in which only a full dose of some active sedative will succeed.

I do not pretend to know how remedies of either class effect their good results—possibly the stimulating cathartics act by increasing still more the peristaltic action—but more probably causing at first an inverted or antiperistaltic action, which inverted action frequently occurs

for reasons which physiology explains, even in the normal condition of the intestine.

My only purpose in alluding to the matter of therapeutics, is to illustrate how little they can be relied upon as a means of determining the pathology of the disease now under consideration, or perhaps of any other disease.

I do propose, however, to refer presently to my own brief experience as to the effect of posture in these cases, and to apply this experience in illustration of the soundness of my theory; for the reason that it is the application of a purely *mechanical* treatment for the relief of a mechanical, not strictly physiological or pathological cause or condition. The laws of mechanics are better known than the laws of therapeutics, and can be more safely applied in the solution of a question of this sort.

A young man was suffering from a severe attack of intestinal colic, which, after some hours, I was able to relieve by medication. On the following day he sent for me again, the colic having returned with about the same severity as before. It was probably two hours before I saw him, and then he was perfectly relieved. He at once explained that his friend, a young man at whose house he was a guest, had told him that he had often relieved himself of a colic by elevating his hips with pillows, or over the end of a sofa. My patient made the experiment, and immediately began to discharge gas from the rectum with the effect of prompt and complete relief of the colic.

More recently, in a similar case, I resorted to the same treatment in a case of severe colic, with a like result.

A mother of several children informs me that she has often noticed that, when her infants have been crying with colic, she has raised them by the feet, as in the act of applying a diaper, and the change of position was followed by an escape of gas, and sometimes by a free fæcal evacuation, after which the child was relieved.

These are all the facts of experience which I have to relate, but these seem to admit of no other explanation than the one I have given; and it was, in fact, from these few observations that I was led at first to question the correctness of the generally accepted theory, and to substitute my own. The argument, however, seems to me to rest upon a much more substantial basis than these facts, namely: the theory of spasm being rejected as impossible,

the theory of displacement furnishes the only remaining rational explanation.

I will add just here, although somewhat out of place, what Niemeyer says at page 591: "We may often clearly perceive that the gas is driven forwards against the fæces, or some other obstruction, and, there arrived, excites the most severe pain."

To my mind the supposition that a doubling of the gut has caused this, in at least a majority of cases, rather than a fæcal obstruction, is by far the most reasonable. This phenomenon occurs quite as often when the contents of the gut are fluid as when they are solid. It occurs (without pain, however) often when the patient is in perfect health. Gas can be felt confined in limited portions of the gut, forming phantom tumors, and which suddenly disappear. If one will listen with the ear against the abdomen, a similar phenomenon can often be detected, unaccompanied with pain, because there is no exalted sensibility, no spasm, and no violent peristaltic action.

In the cadaver I have often also witnessed this very doubling of which I speak. In attempts to inflate the intestine they have often become doubled upon themselves, and suddenly and completely arrested the passage of air, and this could only be overcome by pulling the intestines out, or by disturbing them in some way.

ILEUS.

I have refrained from any allusion thus far to the fact that there is a well-known condition of the intestinal tube called ileus, in which the existence of displacement is recognized as the anatomico-pathological condition, or, more properly, as the immediate cause. This displacement, consisting in most cases of a twisting of the tube, or of a convolution upon other portions; but a reflexion or doubling upon itself is not enumerated among the possible causes. The condition is attended with obstinate constipation, great pain, and usually results in death. Ileus may occur at any age, and almost in any portion of the alimentary canal.

It would seem to be a legitimate conclusion from the present argument, that ileus was in certain cases essentially the same as what has been called "simple spasmodic colic," both being caused by mechanical obstructions arising from displacements and malpositions of the intestinal

tube. The essential points of difference probably being that in colic there is simply a doubling of the gut, which is soon rectified by the natural actions of the intestines, or by the aid of medicines, while in ileus, the twisting or entanglement being a form of displacement less easily rectified, is apt to continue to a fatal issue. It is even probable, or possible, that some cases called "spasmodic colic," and which have terminated favorably, were in fact slight cases of ileus, but in which cases the twisting was spontaneously rectified and a cure thus effected. We might therefore add to the doubling of the intestine as a cause of colic, the possible occurrence of a mere twisting of the gut—an incipient ileus; and it is not impossible, on the other hand, that there may be cases which are termed ileus, and which have terminated fatally, in which the sole cause of obstruction was a doubling of the intestine, and not a twisting or entanglement of the intestine.

What I have further to say upon this subject of posture in its application to other accidents than hernia and colic, is wholly inferential. If elevating the lower portion of the body, so as to cause the heavy organs, such as the liver and spleen, to fall toward the head, dragging the intestinal viscera after them, can reduce a hernia or relieve a colic, it is reasonable to suppose that it might occasionally overcome an ileus or disengage an intussusception.

It is hardly necessary to say that the writer has no thought that the mechanical effects of posture will cure all, nor perhaps many of either of the maladies referred to; nor, indeed, that it shall be a substitute for any other suitable mode of treatment; but only that it be made to supplement other means, in the rational hope that it may sometimes prove effectual, or, at least, useful.

NOTE.—I wish to express my thanks to Dr. W. R. Birdsall, of this city, for several of the references to German writers made in this paper, and to say that, at my request, he proposes to pursue the study of this subject experimentally.

It is also necessary for me to add that so far as the application of posture to the treatment of hernia and ileus is concerned, there is nothing original in my observations, although the philosophy of the method which I have given is probably new; and that, in its application to spasmodic colic, both the method and the explanation are believed

to be new. My attention has been called to the fact that some one has written very recently on the value of posture in the treatment of colic; but I have not seen the paper, nor do I know the name of the author, nor am I informed that the paper was published before the publication of my paper on hernia, in which the views now expressed were foreshadowed. Of course this is a matter of no consequence to me or to the world, but I did not wish to be suspected of appproriating the suggestions of others, and of offering them as original with me.

Clinical Lectures.

CASE I.—*Irritative Cough from Elongated Uvula—Operation.*

GENTLEMEN: This child, about seven years of age, presents an illustration of a persistent dry cough without any pulmonary disorder. The explanation, however, is at once apparent upon directing our attention to the throat. An elongated uvula rests upon the base of the tongue, and constantly titillates the entrance of the larnyx, thus setting up spasmodic cough. From debility of the parts, which is generally accompanied by more or less inflammation or chronic sore throat, the soft palate becomes relaxed, and the uvula drops down upon the tongue; or the uvula itself may be hypertrophied and elongated, as in the present case. This condition is most likely to be set up in young subjects, although it may occur at any time of life, and is often found associated with a strumous diathesis and a delicate constitution.

This apparently trifling affection may produce considerable inconvenience. Hawking, coughing, constant irritation, sense of strangulation during sleep, and nightmare, are among the immediate results; among the later ones may be feared the occurrence of tubercular deposit in the lungs.

If the disorder be due simply to the relaxation of the soft palate, which often occurs in consumptives and dyspeptics, the use of astringent gargles, and applications—among the best of which may be named nitrate of silver solution, gr. xx to gr. xxx, applied with a swab twice a week—may be followed by relief from the symptoms. But when there is a marked hypertrophic elongation of

the uvula, the proper remedy is the removal of a considerable portion of the organ, which is readily accomplished with the scissors. For this little operation no chloroform will be needed, except where the patient refuses to co-operate with the surgeon. Sometimes in young children much trouble is experienced from their active struggling, and then the operation is greatly facilitated by a little of the anæsthetic.

I have now performed the operation on this young lad, and would have accomplished it more satisfactorily if he had not resisted. No hemorrhage will occur after gargling with a little cold water or vinegar and water. I shall insist upon the importance after this operation of his using a liquid diet for a few days, and of being careful not to catch cold.

Remarks Upon Chloroform.

In regard to the administration of the anæsthetic, you should not forget that *chloroform should never be given with the patient in an erect, or even in a semi-recumbent posture.* Owing to the tendency to syncope and heart-failure, the head should not even be raised from the pillow, nor the neck bent. Of course, you would not give chloroform nor any anæsthetic immediately after a full meal, on account of the danger of incomplete vomiting, and strangulation. *No food should be given for at least four hours before the administration of chloroform.* The assistant in charge of the anæsthetic should devote his entire attention to watching its effects upon the patient, and should not look at what the surgeon is doing. The administration must not be hurried; *chloroform must not be crowded, but given deliberately, and with plenty of atmospheric air.* In regard to the amount necessary to be used, in the case of an infant, you have noticed that only a few drops are placed upon the center of a folded towel, in the manner in which you have frequently seen it done by my experienced assistant, Dr. Hearn; for an adult the amount may be increased to half a drachm at first, to which a few drops are added from time to time to supply the loss by evaporation. *The clothing must be loose about the chest and the abdomen, during the administration.* Should a change be noticed in the pulse or appearance of the patient, the chloroform must be at once removed and the patient turned upon his side, the tongue drawn forward, and the face dashed with cold water; and

the chest, or, in the case of a child, the nates, well whipped with a fringed towel wet with ice-water. If the patient do not revive, the foot of the table may be elevated, so as to allow the head to hang down, or the patient may be lifted by the heels, or "inverted," while artificial respiration is attempted. The vapor of nitrite of amyl, or spirits of ammonia, may be cautiously given, which sometimes has a remarkable effect.

With care in administration a fatal result may generally be averted, especially if the tendency to syncope be borne in mind, and prompt measures taken to overcome it. By pursuing the methods just laid down, I have successfully administered chloroform in probably more than five thousand cases without a single fatal result. Chloroform should be administered with especial care to habitual drinkers, and to those who are the subjects of heart or kidney disease. It seems to be particularly applicable to young and middle aged persons. In strong adults, it occasionally happens that we can not make them unconscious with ether, and we are obliged to give them a small amount of chloroform in addition.

Although chloroform does not commonly cause vomiting, and is much more pleasant and efficient than ether, I do not now use it as frequently as formerly, but have yielded my preference in deference to popular opinion, which at present holds the surgeon responsible if any accident should happen. I therefore employ the safer but less agreeable agent to a very great extent, as a substitute for the chloroform.

CASE II.—*Progressive Dyspnœa with Aphonia—Stenosis of Glottis, caused by Intra-laryngeal Growths—Tracheotomy.*

I have here a very interesting patient, sent in by Dr. Cohen from the Out-patient's Department, he having presented himself at the Laryngoscopic Clinic a few days ago. Dr. Cohen will read his history, and tell us what has been revealed by laryngoscopic examination.

"Charles M. L., sixty-three years of age, applied last week for advice in regard to an obstruction of the larynx, which had commenced to be troublesome six months before, but had progressively increased until his voice is reduced to a hoarse whisper; he was also subject to severe attacks of dyspnœa. He stated that he came to

this hospital a year ago for some local trouble in his throat, and was informed that he had growths in his larnyx, but I do not remember having seen him before. However this may be, examination now reveals marked stenosis of the glottis, the edges of the vocal chords being agglutinated by inflammatory adhesions. In addition to this, there are evidently some papillomatous growths below. The stenosis has changed the shape of the glottis, so that the opening, instead of being from before backwards, runs obliquely; on account of the great enlargement of the left wall of the larynx, which encroaches upon the canal. This enlargement is probably due to a malignant growth."

Dr. Cohen further said that he considered the patient in danger of suffocation during one of his attacks of dyspnœa, and that the only treatment to be thought of, at present, was tracheotomy, which would enable him to breathe freely. After opening the trachea as high up as possible, perhaps enlarging it so as to perform laryngotracheotomy, by dividing the cricoid cartilage and cricothyroid membrane, it is possible that the operation might be extended so as to remove some of the growths. It was requested that no anæsthetic should be given on account of the dyspnœa. A tracheotomy tube would have to be inserted after the operation, which he will have to wear during the remainder of his life.

Professor Gross remarked, while proceeding to perform the operation, that laryngotomy is easily performed under ordinary circumstances. An incision is made through the skin and fascia, in the middle line, extending along the front of the thyroid and cricoid cartilages, exposing the crico thyroid membrane, which is then divided, and the tracheotomy tube inserted. A small artery—the cricothyroid—sometimes requires ligation before opening the larynx. Tracheotomy, however, is more difficult; and, in order to accomplish the operation satisfactorily, the aid of an anæsthetic is generally required, especially in the case of a struggling and crying child. I do not know of any operation in the whole range of surgery which I dread more than that of tracheotomy in a child with a fat neck. In the present case the neck is thin, and, as the patient will not oppose the operation, I do not anticipate any serious trouble.

In performing tracheotomy, the patient being placed in the recumbent position, with the head thrown far back

and the neck elevated, a median incision through the skin is carried from the cricoid cartilage nearly to the top of the sternum. The fascia, in the middle line, is taken up on a grooved director and cut, the sterno-hyoid and sterno-thyroid muscles being cautiously separated from those of the opposite side with the handle of a scalpel. The thyroid plexus of veins should be pushed to one side, and held out of the way; the middle thyroid artery will occasionally require a ligature. Whenever there is much embarrassment in breathing, the veins of the neck are generally distended, and considerable hemorrhage may ensue if they are accidentally divided. This bleeding should be entirely checked before opening the trachea, or it might cause suffocation. After the operation, the tube, which for convenience of re introduction after cleansing is surrounded by a canula, is inserted, and an anodyne is administered. The patient must now breathe moist, warm air, at a temperature not lower than 75° to 80° (F.). The tube should be taken out three or four times in the twenty-four hours, in order to clear away mucus and blood; and for the first few days the constant attention of a special nurse is required.

What the effect upon the growth may be I can not tell, but one of the most troublesome features in the case will doubtless be greatly relieved by the operation we have just performed.

(The patient rallied well after the operation, but sank at the end of a week from exhaustion. There was no pulmonary involvement. A microscopic examination of the larynx confirmed the diagnosis.—F. W.)

SELECTIONS.

Treatment of Typhoid Fever.

THE following is taken from a lecture, by Sir William Jenner, delivered at Birmingham:

The natural duration of a well-developed case of typhoid fever is from twenty-eight to thirty days; hence subsidence of the fever before this date should be regarded with suspicion, and the patient not treated as if the specific disease had ended.

In the earliest stage of the disease the patient is prone to commit certain mistakes in treating himself. He may think that he has a common cold in his limbs, as it is called, and attempt to throw it off by strong exercise. He may consider that he is suffering from biliary derangement, and attribute to this the headache, disturbed nights, disordered bowels, etc., and take a dose of drastic aperient. He may think the weakness he feels is to be removed by food and wine, and accordingly prescribes for himself. This self-treatment may add greatly to the severity of the coming illness, and may cost the patient his life. If the temperature renders it *possible* that the ill-defined symptoms are due to the poison of typhoid fever, the patient should be absolutely confined to bed. I very rarely advise a patient's removal to his home, if that be distant, so satisfied am I that fatigue of travel tends to make a mild case severe and a bad case fatal. From the first the patient should be restricted to liquid diet, and bread in some form if the appetite requires it. Milk is valuable in fever, but should be given with caution; for, as a diet, in unlimited quantities, it has led to serious troubles. The caseine of the milk has to pass into a solid form before digestion can take place. Curds form in the stomach, and the digestive powers being weakened in fever these curds may remain unchanged in the stomach and produce considerable disturbance of the system, as restlessness, elevation of temperature, pain in the abdomen, and diarrhea. Said a distinguished chemist, "Do not forget that a pint of milk contains as much solid animal-matter as a full-sized mutton-chop.' I have known a patient drink two quarts and more of milk in twenty-four hours—equal to four mutton-chops. Is such an amount of solid food good for a patient suffering from typhoid fever?

The fever must be met by rest, quiet, fresh air, mixed liquid food, and bland diluents, and the exclusion of fresh doses of poison, as in the milk, water, foul air from drains and from the excreta. For continued sleeplessness, a combination of henbane, bromide of potassium and chloral has acted very nicely; and, in the later stages, previous to signs of nervous prostration, I have never seen any ill effects from these drugs. A warm bath may induce sleep. While opium may do good, it is on the whole a most dangerous remedy.

The chief cause of diarrhea is excess of that due to the intestinal specific changes are error in diet, catarrhal inflammation of the mucous membrane, and irritability of the bowels. In treating the diarrhea, if stools are so frequent as to be dangerous, it is often sufficient to examine the stool to detect the cause and remove it, *e. g.*, curds of milk. In strongly alkaline stools diluted sulphuric acid sometimes affords marked relief. Four ounces of starch-water thrown into the rectum night and morning may check frequent action, or three to ten drops of laudanum in an ounce and a half of starch-water thrown into the bowel night and morning, *after* the passage of a stool. Carbonate of bismuth in twenty-grain doses every four or six hours is one of the best remedies for the catarrhal inflammation of the bowel itself.

In constipation in typhoid fever a small-sized enema of thin gruel, repeated every other day, is usually sufficient. Deep ulceration of one or more of Peyer's patches is not an infrequent cause of constipation. A single *deep* ulcer will paralyze the action of the bowel, and so cause constipation; and this is to be kept in mind as a fact of the highest practical importance when it is proposed to relieve the bowels by an aperient.

Of all the remedies proposed for the relief of flatulent distention of the abdomen, turpentine applied externally is the most extensively employed in practice. Now I must say, with reference to the external application of turpentine, that I have never seen a diminution of the distention which seemed to me to be *propter hoc*. Charcoal has proved a most efficient agent for preventing gas-generating decomposition, which results from food which finds its way into the intestine, mingling with the fetid secretions from the diseased intestines, and with sloughing particles from the solitary and agminated glands. So it is important to select a food substance which leaves no solid residue to undergo decomposition. The administration of pepsin and acid at the same time as a food is often advantageous.

In hemorrhage from the bowel in typhoid fever, even in ever so small a quantity, the patient is to be kept in the recumbent position, and all movements of the bowels restrained if possible. An enema of starch-water and laudanum should be given at once, and laudanum and gallic acid given every few hours. Nourishment in the most

concentrated form should be given, as essence of beef, and milk should be avoided on account of the residue it leaves. When the loss of blood is sudden and copious, or frequent, subcutaneous injection of ergotine may be used. In tenderness of the abdomen, warmth and moisture afford relief in the majority of cases.

From the commencement of typhoid fever the patient's temperature is elevated. Neither my own limited experience nor the evidence adduced by others in its favor has carried conviction to my mind of the advantages of cold baths in typhoid fever, although I entertain no doubt that the direct cooling of the body is in some cases essential to the preservation of the life of the patient. Where the temperature is 106°, rising to 107°, and still advancing, the only source of hope is rapid depression of the temperature by cold baths. Cold applied to the head by means of the India rubber tubing cap will often suffice for the reduction of temperature, or tepid sponging of the body will reduce it a little and soothe the patient. When high temperature is conjoined with rapid, feeble heart's beat, the administration of alcohol often reduces it. Quinia in large and in small doses, and salicylate of soda, act alike in reducing temperature; but I must say I have been disappointed in these two drugs, and have seen both occasionally do much harm by disturbing the stomach and interfering with digestion. Gentle perspiration is advantageous, and the most certain means of producing it is the application of a large, warm and moist flannel covered with oil-silk over abdomen and chest, and the administration of warm, bland fluids. To avert death from failure of heart-power, alcohol is the great remedy. Tremor, out of all proportion to other signs of nervous prostration, is evidence of *deep* destruction of the intestine. In these cases alcohol should always be given to increase nerve-energy and to limit the sloughing and ulceration.—*American Practitioner.*

Speedy Cure of Nasal Polypi.

Dr. Caro, in the *Medical Record*, gives the following painless method of removing nasal polypi, never before made public by the originator:

Mr. G. M——, æt. 60, ten years ago applied to me for

relief from a soft polypus in the left nostril. I proposed evulsion; but not liking the proposition, he left, and I never heard of him until last May, when he returned with another polypus in the same nostril. I advised evulsion once more; he declined it again, and desired me to cure him the same way as did Dr. G. Ceccarini the first time (ten years ago). On inquiry, Dr. C. kindly answered: "The medicine which I use for removing nasal polypi is four or five drops of pure acetic acid, injected with the hypodermic syringe within the body of the polypus once only, very seldom twice; the polypus generally drops off within three or five days without discomfort or pain. Disinfecting lotion will correct the offensive odor." With this information, on the twelfth of August, in presence of my friend, Dr. J. L. Little, I injected the polypus with six drops of chemically pure acetic acid, and instantly we saw the discoloration of it from red to white. Business preventing him from returning, I could not observe the daily progress; but when he called on September 2d, he had only a small portion of it yet adhering to the middle turbinated bone, the other having dropped off the fourth day after the injection; this remaining portion was injected with four drops of the same acid, and on the third day dropped off, leaving his nose clear, without sore or a vestige of it. Neither of the two operations were followed by any unpleasant symptoms, save a slight smarting from the pricking by the needle when the acid was injected. The offensive odor arising from the decaying mass was corrected by a weak carbolized wash. The long interval from the destruction of the first, and the appearance of the second—ten years between—precludes the possibility of this last being a portion of the first, but a new one.

The Terminations of Pneumonia.

Few observations or theories in medicine which have once been regarded as unassailable, escape question in succeeding generations. Many of them also undergo a period of denial and sometimes of re-establishment. Further investigation demonstrates that the observations, if not the theories, of older workers deserved more regard than had always been accorded to them. The question of the terminations of pneumonia furnishes an illustra-

tion of this, as Prof. Leyden has shown in an excellent lecture delivered to the Charite Medical Society, and published in the *Berlin Klin. Wochenschrift.* The old pathologists taught that pneumonia which did not resolve might end in suppuration, in gangrene, or in chronic inflammation and induration; and although in this country these methods of ending, as occasional rare events, have perhaps never been doubted, they have not escaped question at the hands of German pathologists, more than one of whom has doubted whether these terminations of acute fibrinous pneumonia ever actually occur. The occurrence of these events is in itself extremely difficult of proof, the ground for doubt being the question whether the pneumonia thus ending was really of the acute fibrinous variety in a previously healthy lung, a point naturally not easy of demonstration.

The termination of acute pneumonia in suppuration, in abscess of the lung, was first doubted by Laennec, and it is certain that such ending is far less common that was at one time assumed; but it must, in Leyden's opinion, be regarded as unquestionable, and he cites a well-marked instance which has been recorded in the last volume of the "Charite Annalen." A similar doubt has been expressed regarding the termination in gangrene. It is certain that a large number of the cases of inflammation of the lung which terminate in gangrene have a special type, which suggest that they differ essentially from cases of primary fibrinous pneumonia. Crucial cases are difficult to find, but Leyden in this paper adds another to a series previously published—a case in which the patient came under observation on the fifth day of illness and died on the twenty-third, and hepatization in the lower lobe coexisted with diffuse gangrene in the upper. There was no trace of circumscribed or embolic process. The patient was extremely prostrated by the pneumonia, and with the diminution of the fever the heart's weakness increased still more, and it is assumed that the compression of the vessels by the exudation was greater than the feeble heart could overcome.

The question of the termination of pneumonia in chronic inflammation of the lung is of the greatest practical importance and of the greatest difficulty. We must consider, not merely its termination in induration, but in all those chronic processes which may lead to phthisis—as

caseous pneumonia and desquamative pneumonia. Can phthisis result from acute pneumonia in a previously healthy lung? At first sight the answer appears simple. Many cases of phthisis appear from their history unquestionably to have commenced with acute pneumonia. But more careful examination into the history of such cases demonstrates that, in the majority, the pneumonia was not of regular course, but was evidently subacute or chronic. Cases in which the pneumonia was really acute are very rare, and even here we are in doubt as to whether the lung was not previously the seat of phthisical changes. The difficulty of the proof is very great in the case of hospital patients, who come under treatment only when the disease is developed or advanced, and Leyden believes that the process has not yet been demonstrably proved, while one of the first authorities in Germany, Buhl, denies that it occurs.

If we consider the anatomical processes, fibrinous pneumonia appears at first far enough removed from the changes in phthisis, but in the stage of resolution the difference between the two processes is smaller, and is diminished still further if we deny that the phthisical process has any specific characters. Thus the possibility of the result must, on anatomical grounds, be conceded, and its clinical probability, as we have seen, is great, but the actual proof has not yet been given, and is not quite furnished even by a case which Leyden adduces as affording almost a proof. The pneumonia came on in a man twenty-two years of age, after exposure to cold, but at an interval of fourteen days, which constitutes a weak point in the case. The inflammation ran a normal course, except for the incompleteness of resolution. The temperature became natural, but shortly afterward the investigation of the sputum showed the existence of commencing phthisis, which the physical signs soon confirmed.

Simple retarded resolution in pneumonia is a condition of much practical importance. In some cases the physical signs remain for weeks, and even months, and then slowly disappear. Leyden states correctly that many such cases, coming under treatment at a later stage, are regarded as cases of phthisis, and help to swell the number of cases of consumption. Their distinction may be, as Walshe long ago insisted, most difficult. Leyden points out as the differential signs the persistence of the crepi-

tant rale at the end of inspiration (by no means, however, we think, always to be heard), the absence of large mucous rales, the slight degree or absence of retraction, and especially the examination of the sputum. This is scanty, greenish-yellow, and consists of fine threads and small globes, which are composed of pus-corpuscles and degenerated epithelium of the air-cells. He insists strongly on the importance of the microscopical examination of the expectoration in all such cases, and adds a series of illustrative cases, one of which is particularly instructive, since the pneumonia came on under observation, the patient being in hospital on account of enlargement of the liver, and ultimately dying of ulcerative endocarditis.

With regard to the causes of retarded resolution, Leyden points out that the process is influenced by age, occurring less readily in the old, but that this rule is of very limited application, since most of the cases he has recorded occurred in youthful persons. Physicians who see much of the diseases of children will probably agree with us, moreover, that the process is seen now and then in striking form quite early in life. We call to mind a case in which an acute basic pneumonia, of typical course, in a boy of five years, remained unresolved for three months, and then only cleared on removal to a higher altitude. Leyden insists also, with justice, on the influence of weakening of the circulation by the prexia, or by the other causes, and instances the tardy resorption of inflammatory exudation generally, in the pleura, pericardium, or peritoneum in those whose strength is low. A second, also important, element he believes to be an unusual density of the infiltration. Most of his cases suggested such a condition in an intense degree of dullness and slightness of rale. Similar dense infiltration is sometimes found in the young, so as to quench every sound at the height of the pneumonia. In the case which was investigated after death the view was confirmed in so far that, in many alveoli, there were very dense and firm plugs of fibrin, and it is readily conceivable that such plugs may resist disintegration much longer than those which commonly occur. An important aspect of the question is as to the anatomical changes which take place in the lungs in these cases, and which do not pass away when the retarded resolution takes place. Do such lungs recover perfectly, or are there not always changes in varying

degree similar to those the origin of which has been admirably traced by Dr. Wilson Fox in his article on chronic pneumonia in Reynold's "System of Medicine?" It is hardly conceivable that a lung can remain functionless for months, with solid instead of air within the air-cells, with the circulation persisting so as to nourish the walls of the air-cells, without these undergoing perversion of nutrition such as to prevent them recovering a normal state, even though the exudation within them is cleared completely. The point must await future investigation for its settlement.—*Lancet*, Jan. 3, 1880.

The Latest Improvements in Antiseptic Surgery.

Professor Lister has recently delivered a clinical lecture, in which are described the fullest details of his antiseptic treatment, and the most recent improvements in the preparation of his applications.

The subject of the lecture was a young boy with empyema. The left pleura had been distended with pus. The heart was pushed over to the right side, so that the apex beat under the right nipple. Aspiration had been repeatedly practiced with the usual result, viz: reaccumulation of the fluid, and that fluid always yellow pus. The pleural cavity was opened antiseptically; that is, under carbolic spray. A large quantity of thick yellow pus was evacuated; and as air was freely taken in, not only at the time of the operation but at each dressing, there was a certainty that decomposition would have taken place if the spray had not sufficed to prevent it. Indeed, Professor Lister regards empyema thus treated as a test case of the power of the spray to arrest decomposition in the cavity of the chest. To cure an empyema, it is not sufficient to evacuate the pus by aspiration. There must be free drainage, and in order to secure this, a silver tube was inserted in the opening. This tube became filled with lymph, and for a day or two the contents of the pleural sac were retained. On removing the tube and placing the boy on his side, about an ounce of clear serum escaped. Thus was presented the beautiful pathological truth, that a pyogenic membrane ceases to suppurate when freed from irritation. After the operation, the child's general health began to improve. Before the

pleura was opened, he was becoming much reduced—the appetite was poor. There was absolutely no febrile disturbance after the operation, and the strength improved from day to day.

These results were obtained as follows: In the first place the skin was well washed with a 1-20 solution of carbolic acid. There is no need for soap and water, nor for sulphuric ether, as used by the German surgeons. The carbolic solution, if allowed a little time to act, penetrates the epidermis and hair follicles and any greasy dirt upon the skin, and is sufficient to purify the integuments.

In the next place the hands and instruments having been cleansed with the same antiseptic lotion, the opening was made under a thoroughly trustworthy carbolic spray. At the operation, and subsequently at each dressing, the greatest care must be taken that there shall be no chance of introducing into the chest any air other than spray. For several weeks the pleural cavity was filled again and again with spray atmosphere. Had unpurified air been once admitted, putrefaction would undoubtedly have occurred.

In the next place antiseptic gauze was used as a dressing. This has been recently improved. Originally it was made of one part of carbolic acid to five of common resin and seven of paraffin. It is now prepared from one part carbolic acid, four of resin and four of paraffin. The new dressing contains more carbolic acid and a little more adhesiveness. This last quality helps to keep the gauze more securely in place. The paraffin should be quite pure. The gauze so prepared is applied in eight layers, with a piece of rubber sheeting under the outer fold. When, as in empyema, there is a copious discharge of serum, loose folds of gauze are placed around the opening. The wound was dressed once in twenty-four hours, always under spray; but in many cases it may be necessary to change the dressing more frequently. In every case where there is necessary movement of the parts, elastic bandages are used to secure that the edges of the dressing shall be kept in contact with the skin. In empyema it is desirable to use a silver tube to secure drainage, as one of rubber is liable to be closed by contraction of the chest walls. The carbolic gauze may be used freely without any danger of carbolic poisoning. In the case narrated, the child was

clothed in it from his armpits to the hips. Care, however, must be taken to prevent the contact of carbolic acid with the wounded tissues. It is not to be injected into the drainage tubes or placed in contact with raw surfaces. Wounds are not to be syringed out with carbolic lotion.

If, however, the urine should become dark-colored and the appetite fail, or other symptoms of carbolic poisoning arise, boracic-acid dressings may be substituted, or, in the case of deep-seated affections, like empyema, salicylic jute may be employed. In large wounds and healing surfaces, it is therefore of the highest importance to protect the healing part from the irritation of the antiseptic itself. The protective has lately been improved. It still consists of oiled silk, but it is now covered on both sides with a good coating of copal varnish, which renders the oiled silk impermeable to carbolic acid. When the copal is dry the protective is brushed over with a layer of dextrine, in order that it may receive a film of antiseptic lotion before use. Upon the efficiency of the protective in excluding the irritation of the antiseptic, depends its power to prevent the extension of putrefaction from without inwards. Professor Lister states that this protective is soft and pliable when applied; that even dead tissues are, under its use, replaced without the process of sloughing, being absorbed just as catgut ligatures are absorbed; that under it blood clots become organized and new tissues formed by the organization of lymph without any process of suppuration. The protective then is carefully applied to the wound, having first been washed in the carbolic lotion. Then a layer of gauze is dipped in the carbolic lotion and placed on the protective. This and the subsequent layers of gauze must well overlap the protective, and the bandages be so applied as to maintain close contact with the skin. The efficiency of the protective may be tested by putting a piece of lint soaked in carbolic lotion, one to twenty on one side, and after some hours apply the tip of the tongue to the other side, when, if the protective be efficient, there will be no taste of carbolic acid.

At a discussion on antiseptic surgery at St. Thomas' Hospital, London, Sir James Paget expressed his belief that the antiseptic system was potent to arrest the speed of infectious diseases and diminish the mortality after operations. With Mr. Hutchinson, he admitted that ovar-

iotomy, osteotomy, incisions into healthy joints, the opening of large abscesses, could and should only be done under the protection of thorough antiseptic measures. Of all additions to knowledge this has been the greatest, and in that work he, who beyond all comparison, had done most, is Professor Lister, as much by the introduction of antiseptics as by provoking others to scrupulous care in the treatment of their cases.

Listerism has undoubtedly diminished the mortality and the danger to patients situated under unfavorable hygienic conditions, after surgical operations. Holding this belief, we may argue from the greater to the less, and assert our conviction that the same system is capable of preventing septo-pyemia in patients under almost all circumstances. The London *Lancet* believes that Listerism is destined to be the surgery of the future, because, however difficult to apply in individual cases, it guards our patients from unquestionable dangers.—*Western Lancet.*

Consanguineous Marriage.

M. Godet reported to the Medical Society of Rheims (*Michigan Medical News*) some interesting facts bearing upon the question of consanguineous marriage. Of nine children born to an uncle and a niece, who had united themselves in matrimony, two died at an early age, four are deaf mutes, one is an epileptic, while only two are healthy.

This is certainly a very fearful showing, but the case as it stands is a very imperfect argument against close intermarriage. It is lacking in certain elements which are necessary to make it strong evidence against consanguinity in the marriage relations.

Reasoning from the analogies furnished by the inferior animals, there is nothing injurious *per se* in blood relationship of parents; that is, in its effects upon the physical constitution of the offspring. These analogies, so far from showing the relationship to be disastrous, demonstrate that it may be made positively beneficial. The breeders of fine stock understand this, and some of the finest strains are the result of in-and-in breeding. Instances are by no means wanting in which able men, and physically stalwart, are the children of parents between whom

there existed a blood-relationship. With these facts before us, it becomes necessary to look further than to the mere fact of the legally—and morally too—incestuous marriage for the cause of the disastrous results in the case cited. It would have helped to a solution if the reporter had given us some facts regarding the peculiarities of the parents. Was there an inherent tendency in each to any neurosis? Was there any constitutional taint common to each? These coincidences are liable to occur between parents ununited by any blood-relationship, and when they do occur the offspring of the union suffers. The same law applies to the better qualities of mind and body. The children of parents in whom there is a common genius will inherit that genius in an intensified degree. Stock-raisers, in propagating "points," select for mating a male and female which have each the particular "point" sought. The feathering of a bird can be regulated with an almost mathematical certainty by the selection of the male and female. The patriarch Jacob understood the trick of "points," and turned his knowledge to good account. Mr. Darwin, in his theory of natural selection and survival of the fittest, has demonstrated to the satisfaction of most minds that even different species have been created through an instinctive conformity to the principle of "points."

Consanguineous marriages offend our sense of what is right; and under the hap-hazard system, or rather lack of system, of marriage which obtains, should be discountenanced and prohibited by law. If another system, however, prevailed than that under which the very erratic passion called love existing between a young man and a young woman is a sufficient warrant for them to enter into relations through which they may legally procreate, the scientific objection to blood-relationship in parents would be removed in a large measure. Consanguineous marriage intensifies in the child tendencies common to the parents, and is operative for good as well as evil. In cases in which it has operated for good it receives no credit, but when perchance the condition existed through which it intensified a vicious predisposition, it is held up as a crime against nature and morality.

Replantation of Teeth.

The history of the replantation of teeth is so well known that we need not here reiterate it. But from the time of Hunter, who made known the possibility of transplanting teeth, these methods of treatment have been practiced by numerous individuals, both in Europe and America.

The question of replanting teeth appears to have had a somewhat spasmodic existence, and it has, notably during the present year, again been brought prominently before the profession.

In the number for March, 1876, of the *Bulletin et Memoires de la Societe de Chirurgie*, there is a very long paper by Dr. Magitot on this subject, containing a report of fifty cases. An epitome of this article was read by Mr. Charles S. Tomes, before the Odontological Society of Great Britain in March last (see page 160 of the *Review*). In our February number, page 55, there is an article on replantation by Mr. George Torpey; and again in this issue, at page 521, there is published a very excellent lecture by Dr. Thompson.

From all that has been written on this subject we may set forth the following conclusions:

Where the periosteum is healthy, teeth may be extracted, pulp canals filled and replanted with a large percentage of successes.

Where the periosteum is in a state of chronic inflammation, with the same treatment as before mentioned there is a less percentage of successes.

In cases of alveolar abscess the best results are obtained when, in conjunction with replantation, a system of drainage is established.

It is in cases of alveolar abscess which are difficult to treat in the mouth, that the practice of replantation is most justifiable. To obtain drainage of the substances exuded during the healing process different methods have been adopted, such as a fistula through the alveolar process to the apex of the root, and to this may be added a seton; also by having a groove cut in the side of the root, from its apex to the neck of the tooth. But Dr. Thompson has devised a novel method of drainage by having a tube running through the center of the root and opening upon the grinding surface of the tooth. When the cavity

which was occupied by the abscess sac has healed up, and all exudation ceased, the tube can be accurately filled up by a pin, which was adjusted to the tube before replanting the tooth. This principle of drainage adopted by Dr. Thompson is the most complete and effectual, where it can be adopted, of any method hitherto made known; yet we must not overlook the position of a tooth so tubed in the lower jaw, in which case the discharge has to accumulate until it reaches and is taken up by the cotton-wool dressing daily placed in the tube; whereas, with such teeth in the upper jaw, gravitation favors the exudation quickly passing away. Nevertheless, the practical results, some of which we ourselves have witnessed, in all cases where this system of drainage has been adopted, have been eminently satisfactory.

There are numerous instances of replantation where alveolar abscess has existed, and no drainage had been provided, and the cases have done well. But there are evidently more failures, and less good results obtained, when alveolar abscess is thus treated without drainage, than when drainage is provided for.

When replanted teeth have become firm and useful, future trouble is not necessarily overcome; for, in the course of one or more years, the process of absorption may bring about the loss of the tooth. With the view of reducing the liability to absorption, Dr. Thompson excises the portion of the root denuded of periosteum, and restores this with a cap of gold, through which he also passes the drainage tube. It appears that this cap of gold at the apex of the root has been tolerated, indeed, has not given rise to any perceptible disturbance, for, so far, eight months. Though absorption of the gold is not at all likely, yet any portion of the tooth substance which is contained within the alveolus is liable to be so eaten away. The tendency to destructive absorption of the root may, perhaps, be lessened by the removal of the necrosed portion, which is generally considered as an intolerant irritant; but it remains for time and observation to teach us whether a foreign substance, such as a gold cap, in this situation is more acceptable to animate nature than the tissue of her deserted habitation.

The position we have attained with regard to replantation in cases of intractable alveolar abscess may, there-

fore, be said to be that this treatment, to insure the best results, should be in conjunction with drainage.—*Editorial in the Monthly Review of Dental Surgery.*

Trismus Neonatorum—Recovery.

BY JOHN COOPER, M. D., M. R. C. S. E.

On January 20th, after a tedious labor of twenty-four hours, Mrs. M., aged twenty years (white), was delivered of her first-born mature female child.

At birth the funis was twice around the neck, which accounts for the delay in delivery; was in a state of asphyxia and exceedingly cyanotic. It took half an hour to resuscitate the infant. During that process a large quantity of frothy mucus, slightly tinged with blood, poured from the nostrils.

Eight hours after birth unilateral convulsions were observed of the left side. This was at 8 P. M. Twelve hours after it was general, with frequent spasms; rigid lower jaw, with mouth sufficiently open to admit a finger; difficult breathing, livid countenance, clenched hands, with thumbs flexed into the palms, and produced on the slightest motion, commencing with a little scream.

When seen was immediately recognized as an old enemy that had not been witnessed by me for twenty-four years previous, who had vanquished me every time, and had hoped never to meet again. Have treated several cases among the negroes in Louisiana, but no means then used prevented a fatal termination. It has been stated that these cases "invariably occurred on the sea-coast, from cold and damp weather, and unknown in the interior of the country."

All the cases previous to this one were seen in warm weather, in the South, not less than two hundred miles from the sea-coast.

The surroundings in this case were all that could be desired—cold and dry, with thermometer about 32° Fahrenheit. I did not fail to warn all, except the mother, that they must prepare for a fatal result.

Treatment.—Thinking that it might relieve the brain, free catharsis was induced, with calomel and castor oil; after which five-grain doses of bromide of potassium in

sweetened water. Very soon, observing no improvement, had recourse to the following recipe: Ext. physostigma, gr. ss., glycerine, ʒij.; aqua, f. ʒvi. Dose, thirty drops every four hours. After three doses the convulsions were less severe, and after six had been given the paroxysms came on with much longer intervals, milder and of shorter duration; so that by the time eight doses had been given they had entirely ceased and did not return, although the above was continued in half doses every six hours for the next twenty-four hours.

During this treatment the child was nourished with milk and barley water; although the feeding would induce convulsions, yet the child swallowed without difficulty. After the attack was overcome, for four or five days the child had not the power to nurse, so that Knapp's breast-pump was used and fed to the child until she was able to help herself.

It was, a week after birth, as well and healthy as any child of that age.

It may be as well to state that particular directions were given during the attack that the child should be laid on its side, and not on the back, in order to avoid pressure on the occiput.

Feeling that I had a fearful case to deal with, was compelled without delay to make use of desperate means (many would consider the dose too large for a new-born infant), before the little patient was exhausted or became comatose.

Had the poisonous effect of the drug exhibited itself by tremulousness and loss of power of the extremities, becoming limp and flaccid, indicating the approach of general paralysis, should have used chloral as an antidote.

This is the first case of the kind in which I have seen the calabar bean used, and hoping it may prove as useful to others as it was in this, has induced me to report it.

Plans for Reducing Obesity.

Among the complaints which are not maladies which the physician is at times called upon to treat, obesity is one which is frequent and troublesome. The remedies which have been suggested for it class themselves under three heads—

1. Diet. 2. Exercise. 3. Specific Medicines.

The diet plan is well known throughout the civilized world, by the pamphlet of Mr. Banting, of London, nearly one hundred thousand copies of which, if we recollect rightly, were published in the English language alone. The practical difficulties in carrying out his plan are that it cuts off the very articles most generally prized by fat people, and that it brings about in some constitutions a decided debility, and even certain forms of kidney disease. Nevertheless, we know several persons who have for years regulated their weight and prevented a natural tendency to lay on fat, with very little trouble, by a more or less rigid observance of Banting's rules.

Every one knows that sufficient exercise, hard, bodily labor, if you please, will certainly prevent obesity, and remove it when present. The first step in training for an athletic contest is to work off the fat, and there is never any difficulty about it in the hands of a skilled trainer with a willing pupil. But to many it is not at all a pleasant method, and to many more it is practically out of the question, because they have no time and no opportunity to take it up. We are, therefore, often driven to

SPECIFIC MEDICINES.

The question is, are there any? To begin, certainly natural mineral waters have quite a reputation this way. This may seem singular, as a favorite plan to reduce fat, with the older physicians, was, as near as possible, absolute avoidance of all liquids. Thus Ettmuller, writing in 1685, says: "*In obesis remedium infallibile est abstinentia a nemio potu*" (*Opera* I, p. 240). But these mineral waters, such as Marienbad, Montmirail, Andabre, etc., are more or less alkaline and laxative, and thus, it is believed, counteract the effect of the fluid itself. Best of all, probably, is sea water.

Not long since, in a number of the *Paris Medicale*, there were some remarks on the treatment of obesity by the administration of sea water combined with a residence at the seaside. Sea water taken internally, it is stated, acts as a diuretic and purgative, particularly the latter. A small glassful of it should be taken three times a day in a little fresh water or milk. Sea-water baths are also to be resorted to, free exercise should be practiced, and fattening articles of food strictly avoided. It is stated

that sea water used in this manner facilitates the oxygenation of the blood, and that it hastens the elimination of effete materials.

A sea weed, the *fucus vesiculosus*, has, of late years, been brought into notice as an attenuant. It contains iodine and bromine in small quantities, and was administered by Lænnec, in phthisis, as a tonic. In some parts of Ireland it is used to fatten pigs, and even in famine times the peasantry have prepared it for food. That it could have, therefore, any attenuant properties must be held doubtful, particularly as the recent experiments with it have led to very conflicting results. Stille, in the last edition of the *National Dispensatory*, dismisses it as quite obsolete for any such purpose. But Dr. Mulheron, of Detroit, thinks that much depends on the idiosyncrasy of the patient. According to him it is in the obesity of those of the lymphatic temperament that the beneficial effects of this drug are most marked. It has little or no influence in reducing the "fleshiness" of persons of active habits and of the sanguine temperament. In these, he adds, strict regulation of diet affords almost the only prospect of relief, but, owing to the keenness of the appetite which usually exists, this regulation can very rarely be enforced. The cases in whom *fucus vesiculosus* shows its most decided beneficial effects are women, in whom there exists usually some menstrual derangement, as menorrhagia and leucorrhœa, owing to an atonic and flabby condition of the uterine tissue. In such cases an improvement in these local derangements usually precedes the general reduction of fat and the improved tonicity of the general system.

Arsenic, in some cases, has been found effective by Dr. Whittaker, of Cincinnati. He thinks it may act in the reduction of fat, by simply increasing the absorption of oxygen gas, and thus securing its decomposition into carbonic acid gas and water after the usual way. For this remedy has long been administered empirically and with great efficacy in asthma and allied diseases, attended with a diminished inhalation or absorption of oxygen gas.

Alkalies, pre-eminently the *liquor potassæ*, in full doses, are unquestionably successful in diminishing the weight; but the quantities required to accomplish this effectively are nearly sure to bring about alkaline dyspepsia of an

intractable character, and a cachectic condition much more distressing than that of polysarcia.

Such are the alternatives before our fat friends. Perhaps the best advice we can give them is a judicious combination, in moderation, of all three of the agencies for reducing weight which we have enumerated. Taken together or in turn, one or all, will be sure to lessen weight.

The Therapeutics of Acute Rheumatism.

1. In the feeble, anæmic, nervous subject, he gives tinct. ferri chlorid, *m*xxx. every four hours; orders the joints to be kept at rest, wrapped in cotton if the patients desire it; and if they are very painful, small blisters (the size of a silver dollar) to be applied around them. An occasional laxative of Rochelle salt is added. The iron cuts short the disease, lessens the danger of cardiac complication, and also has the power, as Anstie pointed out, of preventing impending attacks. The blisters relieve pain, and bring about a more alkaline condition of the blood and urine. Thus treated, cases of this type rarely last more than two weeks, heart complication is infrequent, convalescence is rapid and relapses uncommon.

2. Fat and flabby subjects require the alkaline plan: Two drachms of potassium carbonate, ½ drachm of citric acid and four ounces of water every four hours, until the urine ceases to be acid, when the amount is to be reduced one-half, the reduction being then continued daily until the fourth or fifth day, when, if the urine continue alkaline, quinia (six grs. every four hours), or preferably tinct. ferri should be added. If the attack is severe blisters are applicable. With this treatment, this class get well within two weeks.

3. Vigorous subjects, often with hereditary tendency. These cases are often promptly relieved by salicylic acid in scruple doses. Not less than ʒ ij. should be administered in twenty-four hours, and considerably more may be required. It is more effective given in solution with an excess of alkali. A cure is thus not infrequently effected in three or four days, but some stomachs can not bear it, and if it depress the heart it must be stopped. If after three or four days it produce no improvement, it is useless to persist in it. In all forms the diet should be

liquid. Opium is objectionable by checking elimination; atropia promotes elimination, and is therefore preferred as an anodyne, being given hypodermically in the neighborhood of the affected joints, and it is rarely necessary to exceed gr. 1–80 a day.

Should cardiac complication arise, the carbonate of ammonia (gr. v. doses frequently), and infusion of digitalis, with hypodermic injection of morphia, should be given at once, to dissolve fibrin, check inflammation and lessen the work of the heart. When the acute symptoms have subsided, substitute iron and quinine for the ammonia and morphia. Experience also shows a blister on or near the præcordia to be useful.

In the sudden hyperpyrexia (fortunately very rare), where the temperature leaps without cause to 106°–109° F., the cold bath is necessary to ward off certain death.—*Prof. Bartholow in Medical News and Abstract.*

On Bronchitis.

BY G. HARRISON YOUNG, L. R. C. S. I., L. K. Q. C. P. I., ETC.

BRONCHITIS is a disease than which there is none more frequent or more important. Its importance depends as well on its frequency as on the serious morbid changes which may remain behind, and on the number of deaths which it causes, especially in young children and old persons. It is therefore essential that we should be acquainted with the disease in its every detail, and be prepared to treat it in all its varieties.

Bronchitis usually results from exposure to cold, but it may arise from other causes. Thus we have mechanical bronchitis, resulting from the irritation of the mucous membrane, due to the constant inhalation of air rendered impure by the presence of particles of dust, iron, etc. Again, we have secondary bronchitis, occurring in fevers, gout and Bright's disease, and depending on the vitiated state of the blood. Another important cause of bronchitis, and one which should always be borne in mind, is mitral regurgitation: in this case it is due to the constant state of congestion of the lungs. There are numerous classifications of bronchitis, but the most practical is into acute and chronic. Another important division is

that based on the part of the bronchial mucous membrane affected, namely, ordinary bronchitis, where the mucous membrane of the large bronchial tubes is implicated; and capillary, where the disease is confined to that of the small tubes. Of course both of these forms frequently coexist.

The symptoms of bronchitis are chilliness and coryza, followed by pyrexia. The temperature rises to 101° or 102°; the skin becomes hot and dry, the pulse rapid and full, the tongue is furred, there is thirst and loss of appetite, the urine becomes diminished in quantity, high in color, and deposits lithates; the bowels are constipated; there is cough, at first frequent, preceded by an unpleasant sense of tickling in the throat; it sometimes comes on in paroxysms, and is especially troublesome at night. There is a feeling of post-sternal oppression, and of soreness and tenderness at the lower part of the sternum, caused by constant coughing. At the commencement of the attack the secretion of the mucous membrane is diminished; soon a clear, viscid, frothy mucus is expectorated. After some days the expectoration becomes thick, muco-purulent, and only partially aerated. The physical signs are quite distinctive in uncomplicated cases. Bronchitis is bilateral; percussion is normal. At the commencement of the attack sonorous bronchi are heard on auscultation over the larger tubes, while over the borders and apices of the lungs vesicular breathing is heard as usual. These morbid sounds are caused by the air entering tubes whose caliber is lessened by the swollen and dry state of the mucous membrane. When the bronchial secretion becomes profuse, large bubbling rales take the place of the dry sounds.

Capillary bronchitis, or suffocative catarrh, is a highly dangerous affection. It is much more fatal when it attacks, as it usually does, young children, or persons who are past middle age. The attack may be primary, or it may supervene on an ordinary case of bronchitis. The symptoms are very severe, and are generally quite characteristic. The attack is ushered in with the usual febrile symptoms; soon, however, urgent dyspnœa, with occasional paroxysms of orthopnœa, sets in; cough becomes violent and paroxysmal, expectoration is very difficult, owing to the very viscid nature of the sputa, the circulation through the lungs becomes greatly embar-

rassed, the right side of the heart is engorged, the jugular veins are distended, the face assumes a dusky hue, and the lips are livid. If the case proceeds to a fatal termination the face becomes covered with cold sweat, the surface begins to cool, the pulse becomes weak and irregular, the expired air is cold. The patient becomes comatose, and in some cases dies convulsed from the action of carbonic acid on the brain. The physical signs are the same as in the former variety, except that in this case fine bubbling rales are heard instead of the large ones.

Chronic bronchitis usually follows the acute. In old persons, however, it comes on every winter, when it is known by the name of winter cough. It is this winter cough which is the great cause of emphysema; it should, therefore, be looked upon as a most serious affection, and should receive prompt and careful treatment. The symptoms and physical signs of chronic bronchitis are the same as in the acute. The diagnosis of uncomplicated bronchitis presents no difficulty. In some cases, however, where complications occur, it may not be easy to determine the exact nature of the disease. Thus, there may be dullness on percussion: this is due to the mucous membrane having lost its usual sensibility. The patient is, therefore, not aware of the necessity for coughing. The accumulated secretions gradually gravitate to the base of lungs and produce the dullness. This dullness has not infrequently been mistaken for pneumonia. It may, however, be readily recognised by the absence of the characteristic symptoms of pneumonia, such as the prolonged rigor, the rapid rise of temperature, the pungent burning skin, the great disturbance of pulse-respiration ratio, etc. On physical examination the dullness in bronchitis will be found to occupy the most dependent part of the lung, not, as in pneumonia, mapping out a lobe. The dullness will also change with change of posture, while vocal fremitus and resonance are diminished.

Chronic bronchitis with dilated bronchi may be mistaken for phthisis. Dilatation of a bronchus may be caused either by collapse of a lobule of the lung, the bronchus then dilating to fill the vacuum thus formed, or, from long continued and difficult cough, the bronchus giving way at some weakened point. These cases resemble phthisis in the following points: emaciation, sweating, debility, cough, expectoration. It may usually be diag-

nosed from phthisis by the fact that phthisis begins at the apex; dilatation generally takes place at the root of the lung, in the vicinity of the large bronchi. In phthisis there is hæmoptysis; in dilated bronchi this is absent. The sputa are fetid in dilated bronchi; they are not in phthisis. Attention to the above points, together with careful physical examination, will generally be sufficient to clear up the case. If not, the progress of the case will remove all doubt.

In speaking of the morbid anatomy it is necessary to know that bronchitis may prove fatal, and yet no marks of inflammation appear on the mucous membrane. This, however, can only occur when the smaller tubes alone are affected. It is due to the fact that the mucous membrane of the capillary tubes approaches in character a serous membrane, and serous inflammations frequently disappear after death. In ordinary cases the mucous membrane is covered with thick tenacious mucus. When this is removed the membrane underneath is found thickened, red and irregular. In some cases even slight ulceration of the mucous membrane may be seen.

Plastic bronchitis deserves mention here, as, though not often met with, it may be mistaken, when it does occur, for phthisis or pneumonia. Its symptoms are wasting, cough, hæmoptysis, and expectoration of plastic casts, called bronchical polypi, and dullness on percussion. It may be diagnosed from both phthisis and pneumonia by the fact that plastic casts of the bronchial tubes are expectorated, and on physical examination vocal fremitus and resonance are diminished instead of increased.

Syphilitic bronchitis is an affection deserving of careful consideration from the fact that it is liable to be mistaken for phthisis, and which, if not properly treated, will assuredly become phthisis. The symptoms resemble those of phthisis in the following points: There is great emaciation. In the syphilitic affection, however, the patient has a peculiar dull, cachectic appearance, which is very suggestive of syphilis. There are night sweats, but in this case the cutaneous exhalation is clammy, and has a heavy unpleasant smell. Hæmoptysis is a marked symptom, but the expectorated blood, instead of being of a bright arterial hue, is dark in color, and somewhat grumous. Diarrhea is a very troublesome and persistent symptom, which usually defies all ordinary treatment. There is dull-

ness on percussion, but, instead of being at the apex, as in phthisis, it occurs in scattered patches over both lungs, being due to gummatous deposits. Cough is not usually so troublesome a symptom as in phthisis. Expectoration is usually profuse, and the expectorated matter is fetid.

From the above we see that the following are the chief points of distinction between these affections:

1. In syphilitic bronchitis the sweat is clammy and unpleasant in odor; in phthisis it is not.

2. In syphilitic bronchitis the expectorated blood is dark and clotted; in phthisis it is bright in color.

3. In phthisis the dullness is apical, while in the bronchitis it occurs in scattered patches.

4. The expectoration is fœtid in syphilitic bronchitis, it is not in phthisis.

5. In phthisis the patient is bright and hopeful, while in syphilitic bronchitis the expression is dull, heavy and depressed.

The morbid appearances distinctive of syphilitic bronchitis are the presence of gummata in the substance of the lungs. These growths are situated in the connective tissue between the air vesicles and bronchial tubes. They are surrounded by a layer of connective tissue which contains a number of blood vessels; inside this is a covering of fibrous tissue; the center of the tumor is filled with a dirty yellowish-grey substance, which after a time undergoes caseation.

It is now necessary to consider shortly the most important sequelæ of bronchitis. Of these, that which first claims attention is phthisis. Frequently repeated attacks of bronchitis may produce phthisis in subjects in whom not the slightest hereditary tendency exists. If such is the case how much more likely is phthisis to result in persons who are already predisposed to the affection. In patients who are phthisical bronchitis works the greatest havoc, so that in these cases it is of the greatest importance to treat the slightest attack at once, and continue the treatment until the disease is thoroughly cured.

Another very important sequela of bronchitis is emphysema. It most frequently occurs in old persons who have suffered for some time from winter cough; yet no age is exempt from it, and it may even be met with in young children where strong family predisposition to fibroid degeneration exists.

Emphysema may be caused either by collapse of a lobule of the lung, when the surrounding vesicular portion becomes emphysematous to fill the space formerly occupied by the collapsed lobule. This, however, is of comparatively little importance. Or the whole or greater part of the lungs may become affected. In these cases it is caused by frequent cough, especially where any obstruction exists to the free expiration of the air. When such is the case the air is forced into the air vesicles, which distend and burst. After a time the lungs permanently lose their elasticity. When this takes place a disease becomes established, which causes the greatest possible inconvenience to the patient, and which exerts a most detrimental influence on his general health.

In the treatment of bronchitis the indiscriminate use of expectorant medicines frequently does much harm. Thus I have several times seen cases where the mucous membrane was dry, inflamed and irritable, yet in these cases turpentine was ordered, which, being a powerful styptic, as we know, could only aggravate matters. Yet, if the prescribers are asked why they use turpentine in these cases, their invariable answer is, "Because it is an expectorant!" Such treatment is manifestly incorrect and unscientific, for expectorants have their special modes of action as well as any other class of medicines. If we consider these special modes of action we find that tartar emetic and ipecacuanha increase the secretion from the mucous membrane. Alkalies, especially ammonia, increase the amount of, and at the same time liquefy the mucus, thus assisting its expectoration. Blue pill increases the secretion, and also acts as a powerful alterative. It is very useful when combined with ipecacuanha.

The medicines which facilitate expectoration are carbonate of ammonia, senega, squill and stimulants. Turpentine diminishes the secretion, but, from its stimulant action, it also assists expectoration. It is therefore specially indicated in debilitated patients in whom there is profuse expectoration.

Opium, morphia and hydrocyanic acid relieve cough, but they should only be given where they are really necessary, as they diminish the secretions.

When a person is seen suffering from the premonitory symptoms of bronchitis, the attack may sometimes be cut short by a hot mustard bath and ten grains of Dover's

powder at bedtime. I have often seen this treatment successful in what threatened to be a very severe attack of bronchitis. If, however, this does not succeed in checking the disease, the patient should be confined to the house, or, if the attack is bad, to bed. The temperature of the room should be kept at about 65 deg.; it should be well ventilated, but the patient must be carefully preserved from all draughts. The action of the skin should be promoted either by vapor or camphor baths.* If the bowels are irregular 5 gr. of calomel, followed, if necessary, by a dose of castor oil in the morning, acts better than any other aperient. In bronchitis, occurring in strong adults, I prefer tartar emetic, in one-sixth gr. doses, to any other remedy. It frees both the bronchial and cutaneous secretions, and lessens the inflammation. It may very advantageously be combined with spt. ammon. arom. Tincture of aconite in 2 m. doses every hour is very useful, especially in phthisical persons, where the great object is to overcome the inflammation in the shortest time possible. It should, however, be used with caution. Leeches to the chest and dry cupping afford great relief. Linseed meal and mustard poultices should be kept frequently applied.

In capillary bronchitis tartar emetic may be given for the first day or two, but if there are any signs of depression it should be omitted. Afterwards spirits of turpentine, with ammonia and ether, are the most useful remedies. Ether is here very valuable, as, besides being a diffusible stimulant, it overcomes any spasm of the muscular tissue of the bronchial tubes which may exist. If the kidneys are not acting properly spirits of juniper may be given with great advantage. Stimulants are generally required, and the diet should be nutritious and easily digested. Turpentine stupes and linseed and mustard poultices should be kept constantly applied. In those cases where the bronchial tubes become blocked up with mucus, an emetic will bring this away, and afford great relief. When the acute symptoms are passing off iodide

*To give a camphor bath the patient is undressed and placed on a cane-bottomed chair, being then surrounded by a cloak. About one drachm of camphor is placed in a crucible and burned under the chair. After remaining for a few minutes in the vapor the patient is removed to bed. In a short time a gentle perspiration sets in, which is most beneficial. The bath may be repeated every second day.

of potassium and carbonate of ammonia internally, with flying blisters about the sternum, afford the best results.

In chronic bronchitis it is of great importance to improve the general health. The diet must be carefully regulated. Stimulants are needed in most cases, and a general tonic plan of treatment should be adopted. The condition of the bowels should be inquired into, and if necessary corrected. If the heart is affected tincture of digitalis should be given. Where there is bronchorrhœa, turpentine, chloride of ammonium, and the balsams, together with inhalations of turpentine, creosote, or iodine, are most effectual in relieving excessive secretion. If there are fetid sputa, carbolic acid inhalation will usually correct this unpleasant symptom. When the healthy action of the mucous membrane is becoming re-established arsenic is very beneficial. It increases the appetite, improves the state of the blood, and restores the tone of the pulmonary tissues. If there is anæmia tincture of the perchloride of iron may be combined with the arsenic. If this is done the bowels should be kept regularly acting, or the iron will have little effect. Iodide of ammonium and sulphur are most useful in gouty bronchitis.

Persons who suffer from winter cough should, if possible, reside during that season in some mild climate. If this can not be they should be kept constantly under observation, and the slightest pulmonary symptoms should receive attention and treatment.

In syphilitic bronchitis mercury should on no account be given, or the case will become one of phthisis. Iodide of potassium and iodide of iron, with decoction of cinchona, will generally greatly relieve the symptoms. Cod-liver oil, with good diet, will assist in restoring the patient.—*Dublin Medical Press.*

Clinical Lecture, with Remarks, Upon a Case of Typhoid Fever and the So-called Specific Treatment.

BY PROFESSOR ROBERTS BARTHOLOW, M.D.

Gentlemen:—The first patient brought in this morning will be the case of ambulant typhoid which was presented to you a week ago. As I told you then, such cases are

rather rare. When we saw him at that time, it was the case of a man going about suffering from inflammation and ulceration of the glandular patches in the small intestine near its termination, which are the characteristic lesions of typhoid. The risk is so great in these ambulant cases that we could not allow the patient to continue going about; perforation and peritonitis would be liable to occur, and a fatal issue would naturally result. He was put to bed, and since then he has exhibited the characteristic fever of a remittent type, which we recognize as typhoid fever. The fever of typhoid is said to be of the continued type, but it is so only relatively, not absolutely. In health, as you know, there is a daily fluctuation in the bodily temperature, which attains its maximum in the early evening and its minimum in the early morning hours. The fever of typhoid shows the same variations—an evening exacerbation and morning remission. During the first week of the fever the morning decline is exceeded by the evening rise until the maximum is attained in the second week, toward the end of which we observe the morning remissions becoming more marked, until the temperature returns to the normal in the fourth week.

Upon the day of admission this man's temperature was 104° F. in the evening. You remember I told you that if the temperature did not go above 102° F. we would not interfere, but if it rose above this point we would rely upon a full dose of quinine for an antipyretic action. The resident physician very properly gave him twenty grains that evening with decided effect. Now, the excursions of the temperature record are less—as it is the third week—preparatory to convalescence, which is nearly at hand. He has only two evacuations per diem; his tongue is cleaning, although still raw and glazed, and the hebetude is passing away. You must be struck with the improved expression and intelligent appearance of his countenance, and you notice that his mental condition is brighter than at the beginning.

There was a plentiful crop of the peculiar rose-colored erythematous eruption of typhoid. It is now disappearing, but still can be recognized. The distention of the abdomen and gurgling in the right iliac region are also less. Notwithstanding the diminution of the gurgling there is still some tenderness, and our patient is not yet

free from danger. Notwithstanding the fact that it was a mild case, there may ensue a perforation of the intestine with serious results; we shall therefore still carefully attend to his diet, and keep him strictly in bed. While these ulcers of the intestine are only partially healed, if he were careless and ate indigestible food, a sudden development of flatus might distend the bowel, and cause a rupture and fatal collapse or peritonitis. This accident may occur both in light and in grave cases of typhoid fever, but it is a remarkable fact that perforation is more liable to take place in the ambulant cases than in the severer forms, and may be produced by a single, apparently insignificant ulcer in the intestine. We should therefore always insist upon these precautions as to rest and diet in each individual instance of typhoid fever, although it may not be a very marked case of the disease.

In regard to the treatment, I have told you that when the temperature rose we gave him a full dose of quinine with the desired antipyretic effect. He has had the so-called specific treatment of Lugol's solution, five drops three times a day, well diluted. Upon this he has done very well. I pointed out, in the previous discussion of the case, that there were two main points in the mode of treatment, termed by the Germans the specific treatment for typhoid fever: calomel given early in the disease in ten-grain doses for three or four days during the first week of the disease; and the administration of iodine, either in the form of tincture or Lugol's solution. The latter form is preferable, and it is that which this patient has been taking.

From experience in other cases I consider the above method certainly an advance in the treatment of typhoid fever. It is not termed specific on account of any supposed influence it has directly upon the typhoid fever, but from the power of the iodine to destroy the germs of the disease in the discharges of the intestinal canal, on account of its well-known antiseptic properties. The propagation of typhoid is due to a peculiar *materies morbi*, which is supposed to be in the alvine discharges, and which subsequently finds its way into our bodies with our food or drink, or even through the inspired air, and there reproduces the disease. The mode of action of iodine upon these ferments has led to the supposition

that it would be a useful agent in the treatment of typhoid, and experience has confirmed this view.

POSTERIOR SPINAL SCLEROSIS.

As this man walks into the arena, notice his peculiar method of locomotion. Observe his gait, the manner he has of swinging his foot around, describing a semi-circle, bringing his heel down with considerable force; he treads with weight, making some noise in walking. This affection gives a man rather an imposing gait, unless the difficulty is very far advanced.

Now, from the inspection of the man's gait, who will make a diagnosis of the case?

Let us note his history. The disease has existed for a long period, at least five years, and it was preceded and subsequently accompanied by acute neuralgic pains in the lower extremities, which he describes quite correctly as "lightning pains shooting down the legs." He also complains of a feeling of pressure or stiffness in the muscles of the calf; he has not noticed the sensation of a constriction tightly around his limbs, like a cuirass closely binding them, as is sometimes experienced in these cases. He has decided disturbances of sensibility in the lower extremities, especially a marked degree of numbness. To determine the physical condition of the parts, we will now have the limbs stripped, and apply certain tests to ascertain whether we shall obtain the normal reactions or not. We shall follow certain methods to determine accurately the condition of the muscular and other parts of the limb, and, indirectly, the general nervous system, to see if it shares in the affection. What are these methods? In the first place, we test the power of motion; interrogating the muscles to see if their mobility is impaired, and if so in what respect. This point we shall now ascertain. You have noticed that in walking he moves the limbs abnormally, and we ask, Is this because they are weak, or is it simply disordered motion?

As he lies on his back, now, he kicks with vigor, although the movements are badly directed. As I now grasp his leg, with the knee partially flexed, I find that he uses considerable power in attempting to extend the limb; there is no muscular paralysis. The trouble in walking is, therefore, not due to want of muscular power, but to want of co-ordination in the muscles, which makes

his movements appear awkward. This loss of co-ordination is observed even when he directs his attention to his efforts, but when his attention is called off, or his eyes are shut, the condition becomes more marked; therefore we say that both voluntary and automatic co-ordination are disordered. I have pointed out to you that the mechanism in walking is partly automatic and partly volitional. In ordinary walking we are not conscious of any effort in using the muscles, but our attention is free for other objects, while the muscles regularly and rhythmically perform their functions, deriving their innervation from the spinal cord; these movements are automatic. If I should take up a pen to write, and there happened to be want of co-ordination of the muscles, I would be unable to write intelligibly; the voluntary action would be affected, while the brain (apart from the special cortical center for written language) would be intact. Applying our test to the patient, we find that if we talk to him while he walks he can not walk well, but staggers; but when he directs his attention to the effort he is making he can walk better.

In order to walk with success, it is essential that sensibility should be unaffected, so that we can feel the resistance of the ground, or the surface we walk upon; we must be conscious of the feet pressing upon the ground. If this is imperfect, our movements are disordered. Therefore it is that plantar anæthesia plays a large and important part in the troubles under discussion. We find that ordinary tactile sensibility, sensibility to heat and cold, and perception of pain—which are entirely distinct properties of sensory nerves—are not always equally affected. Let us first try the sense of touch, for which we use the æsthesiometer, a pair of compasses with sharp points. At the same time that we ascertain the accuracy of his tactile impressions, we will also learn the rate at which impressions are transmitted to the cerebral centers. You know that even in health we do not perceive peripheral impressions immediately; it is only apparently so, although we think we recognize them at once. In this case, asking him to tell us when I touch his foot with the point of the compasses, you notice that the transmission of impressions is delayed; they take a longer time than in health to reach the brain. There is a perceptible interval between touching the surface and his perceiving it; we

may say, therefore, that the transmission of tactile impressions from the surface to the center is retarded. Now try his ability to distinguish heat from cold. Applying in succession hot and cold sponges, we find that he faithfully interprets temperature, as he is correct in his replies; he can distinguish heat from cold. Testing his appreciation of pain by pricking him with the points of the æsthesiometer, we learn that there is actually less numbness in the plantar surface than in the legs, although the perception of pain is sensibly impaired in both regions.

With the æsthesiometer two points are felt as one, one and one-half inches apart on the dorsum of foot; on the leg they are felt as one at two inches; so that the tactile sense is impaired, but not abolished. Sensibility to touch, pain, temperature, we may, therefore, say is present, but is impaired.

This examination changes to some extent my opinion of the locality of the lesion in the spinal cord. I was disposed at first to locate the disease in the antero-lateral region, but as the disorder is mainly that of co-ordination the lesion must be located farther back, and mainly in the posterior columns.

His difficulty in walking is not so much due to the want of sensibility in the plantar surface, which at first suggested itself as the explanation, as to the marked want of co-ordination in the muscles concerned.

The electrical examination is necessary to complete our study of the case. You see the muscles respond perfectly to the faradic current, and contract energetically to a moderate current.

In the early stage of posterior spinal sclerosis, you remember that the disorder, as a rule, manifests itself first in the lower extremities, and afterward extends to the arms in the second stage, or, in the opinion of some writers, in the third stage. Our patient has no trouble in his upper extremities; he can use his knife and fork in eating, and button his clothes without difficulty. We infer that the disease is in its first stage, and has not involved the upper part of the spinal cord. What confirms our opinion as to the diagnosis and the localization of the affection in the lower part of the cord is the fact that the sexual functions are recently impaired; he has not had an erection for some time, and lately has had some noc-

turnal seminal losses. This sexual impairment generally belongs to the early symptoms, and usually precedes, rather than follows, disturbances of motility.

The disease is therefore still limited to the lower part of the spinal cord, and as the power of co-ordination resides in the posterior part of the structure we conclude that it involves mainly the posterior columns, making it a case of posterior spinal sclerosis, which now explains fully the attacks of fulminant pains that have so long annoyed him.

In considering the question of treatment, we find a general agreement of opinion among authorities that, as regards therapeutics, the condition is not encouraging. No one will dispute this who has had anything to do with the disease. The best results obtainable—palliation of symptoms and the arrest of the disease—are perhaps secured more satisfactorily with phosphorus than anything else. It should be given for a long time and in small doses (about one hundredth of a grain), for which cod-liver oil is a good vehicle. Some curative results have been obtained by this treatment. In order to maintain the nutrition of the parts affected, a weak continued current should be applied from the spine to the lower extremities; although this will have no effect upon the disease, it will materially relieve the pain. He shall therefore have the constant current daily, in conjunction with the internal administration of phosphorus dissolved in cod-liver oil, of which he should take a teaspoonful, containing one hundredth of a grain of phosphorus, three times daily, after meals.

How to Cure Fits of Sneezing.

During the recent rapid changes of temperature I caught severe cold in my head, accompanied by almost incessant sneezing. My unfortunate nose gave me no rest. The slightest impact with cold air, or passing from the outside air into a warm room, equally brought on a fit of sneezing. In vain I snuffed camphor and pulsatilla—the light catarrh still triumphed over me. At length I resolved to see what the maintenance of an uniform temperature would do toward diminishing the irritability of

my Schneiderian membrane, and accordingly I plugged my nostrils with cotton wool. The effect was instantaneous. I sneezed no more. Again and again I tested the efficacy of this simple remedy, always with the same result—however near I was to a sneeze, the introduction of the pledgets stopped it *sur le champ*. Nor was there any inconvenience from their presence, making them sufficiently firm not to tickle, and yet leaving them sufficiently loose to easily breathe through. This is really worth knowing; for incessant sneezing is among the greater of smaller ills, and it seems only a rational conclusion to hope that in this simple plan we may have the most efficient remedy against one of the most distressing symptoms of hay-fever.—*S. Messenger Bradley, in British Med. Jour.*

MICROSCOPY.

Postal Microscopical Society.

WE take the following from the *Lancet*, of London, February 7:

"*To the Editor of the Lancet:*

"SIR—Thanks to your insertion of letters on the subject. The effort made by the Postal Microscopical Society to establish a separate histo-pathological section has been most successful, and a number of boxes have been placed in circulation. Most of its slides have been of a very high order—some sent by a professional mounter, and others the work of amateurs (medical men)—and are triumphs of section-cutting, injecting, staining, etc.; and, being accompanied by accounts of the cases from which they were taken, are thus made exceedingly instructive. It is a great pity that slides, illustrating rare forms of disease, or original investigations into the causes of morbid action, should be seen by the comparatively small number of medical men who attend the meetings of Societies; and it will be a great boon to the profession generally, if those who have such slides to exhibit would place them at the disposal of this Society, that they may be seen by any of us who are interested in microscopy. The boxes have been gradually improved, so that it is almost impossible for the properly mounted slides to be injured in transit.

"The annual subscription is very small; namely, fifty cents. Any information about the Society will be gladly given by the honorable Secretary, Mr. Alfred Allen, Cambridge place, Bath; or by "Yours truly,

"C. P. COOMBS, M. D.

"LONDON, CASTLE CARY, *Jan.* 30, 1880."

Employment of Wet Collodion for Microscopic Sections.

M. MATHIAS DUVAL points out the difficulty of finding any body which would firmly hold delicate objects, in which there are a large amount of hollows and cavities, such, for example, as embryonic tissues; it is obvious that the best substance would be one, which, though solid, is not friable, and which at the same time is homogeneous; these conditions are not satisfied by the ordinary imbedding mixtures, such as gelatine, wax and oil, or soapy bodies; one that has been largely used is gum solidified by the action of alcohol, and this has been recommended by Dr. Klein; in the directions appended to their "Treatise on Embryology" (of the Chick), Foster and Balfour expressly state that they do not recommend it for the study with which they are there particularly engaged, nor does the experience of other embryologists seem to do otherwise than confirm their opinion. Nor, again, do the methods ordinarily in use allow of the advantages which would be gained by the use of a transparent imbedding substance.

Already used in its *dry* state for certain observations, collodion has been found to have much to recommend it, but it is too hard for delicate bodies; when, however, a small quantity is treated with alcohol at 36°, it is found to retain its volume, while presenting a large amount of transparency. Having used the substance for six months, M. Duval now feels justified in recommending it to the attention of students; the embryos to be examined are first hardened by osmic acid, alcohol, or some other method, are stained with carmine, and then placed in alcohol; they are placed for a few minutes in ether, and are then removed to the liquid collodion, in which they remain for a period varying from ten minutes to twenty-four hours. When withdrawn from this, they have attached to them a piece of elder-pith, or are, if their size and state permit

of their being cut without any such aid, thrown at once into alcohol; the body now becomes surrounded with an elastic mass of collodion, which solidifies without alteration of volume, and encloses the pith if this has been already added. Thus treated, the tissue is ready for immediate section, or may be kept in alcohol for an indefinite period without danger.

As the sections are made in the ordinary way, that is, the body itself and the razor being both wetted with alcohol, it is obvious that the collodion will be prevented from becoming dry; there is no need to remove the imbedding substance, and the section may be immediately placed on a slide; a drop of glycerine and a cover-glass are then all that is necessary for the observer to find himself delighted with an object, the optical properties of whose imbedding substance are exactly the same as those of glass. Another advantage remains to be noted: the collodion has not in M. Duval's sections lost its transparency after a period of six months.

A similar method may be used for fetal cerebral structures, and in the study of the eye or of the cochlea and similar delicate parts.—*Jour. Royal Mic. Soc.*

A Simple and Cheap Camera Lucida.

Mr. T. B. Jennings sends to the *American Journal of Microscopy*, a description of a very simple camera; which answers all the purposes of the microscopist. It is made as follows: Take a flat cork and cut a hole through its center large enough to fit over the eye-piece. Just below the hole make an incision, so that it will hold a thin glass cover at an angle of 45°. We have been using for several years, with satisfactory results, a camera made on the same principle, consisting of a little wooden box about one inch square, with a hole cut in one end large enough to fit on the eye-piece; through the center of the top and bottom a hole half-inch in diameter is cut; a little groove is cut on the inner surface of the two sides, from the opposite corners of the box, in which is slipped a thin piece of clean mica, which will be at an angle of 45°. Place the microscope in a horizontal position and look through the hole in the top of the box.—*Medical Herald.*

GLEANINGS.

CHLORIDE OF BARIUM IN THE TREATMENT OF INTERNAL ANEURISM.—A case of abdominal aneurism successfully treated by chloride of barium is reported by F. Flint, M. D. The patient, a married lady, aged sixty-five, was first seen in February, 1878, and the diagnosis was confirmed by several professional gentlemen, including Mr. J. W. Teale. For five months Tufnell's treatment was tried, and rigidly carried out, without producing the slightest improvement. Chloride of barium was then selected as a probably useful remedy, and given in doses of one-fifth of a grain three times a day; after three or four weeks the dose was increased to two-fifths of a grain, and maintained at this point during the remainder of its administration, with the exception of a very short trial of three-quarters of a grain. Within a fortnight after the use of the chloride was begun there was a marked diminution of throbbing, which was both subjectively and objectively evident; after nearly five months' continued use of the drug, the tumor was so reduced that it could scarcely be felt, and only a faint systolic murmur could be heard. Four or five months after the discontinuance of the drug, there was still a slight systolic murmur, but no throbbing; the pulse was about seventy-two, and it had entirely lost its unnatural tension.

Mr. J. W. Teale has recently seen the case again, and expressed himself highly gratified with the change in the patient's state—so that testimony can be borne by an independent trustworthy practitioner to the accuracy of the diagnosis and the reliability of the improvement.

In large doses, two drachms and upward, chloride of barium paralyzes the heart and great blood-vessels; in doses of about a grain it is a stimulant; the dose selected was less than the stimulating dose, and Dr. Flint thinks he might have done better by adhering to the first amount given (gr. $\frac{1}{5}$), instead of increasing it. The drug appears to have a decided affinity for the muscular coat of the arterial system, and it probably restored tone to the diseased portion of the arterial coat, and thus gave rise to consolidation of the weakened wall. In the case in question the aneurism appeared to be fusiform rather than sacculated, and therefore deposition of fibrin could not

very readily take place. Perfect rest is essential to any medical treatment, and it would be well to try Tufnell's diet alone at first, and afterward to adhere to it as far as possible during the use of the drug.—*The Practitioner.*

THE INFLUENCE OF DIFFERENT POSITIONS OF THE BODY ON ITS TEMPERATURE.—This subject has been lately studied by Dr. Sassezky (*Petersburg, Med. Woch.*). His method of experimenting consisted in placing the patient upon his back, first with the arms folded on the trunk, and then with the same extended, the temperature being simultaneously measured in the ear, mouth, axilla, rectum, fists, and between the first and second toes. The pulse and respirations were noted at the same time. In other experiments the legs were raised instead of the arms, the patient lying on his back as before. The general conclusion arrived at was that elevation of the extremities, and especially of the legs, raises the temperature of the whole body, *except that of the part elevated*, some fraction of a degree, or even one or more degrees, centigrade. The effect is more marked in sick people than in the healthy. The pulse and respirations are accelerated in both by raising the limbs. The greatest rise of temperature is observed in the axilla and rectum. The effect of posture is most decidedly seen in typhoid patients, especially in cases where the fever has been severe and the nutrition of the heart is much impaired. Patients with true heart disease come next; then those with phthisis. The explanation of these facts appears to be a simple one. The flow of warm blood to the elevated limb is diminished, and that to the other parts of the body increased; and the weaker the condition of the heart, the more decided do the differences of temperature between the two regions become. —*Med. Times and Gazette.*

DIRT AND BODILY HEAT.—The part which the skin plays in the regulation of bodily heat is not adequately estimated. The envelope of complicated structure and vital function which covers the body, and which nature has destined to perform a large share of the labor of health-preserving, is practically thrown out of use by our habit of loading it with clothes. It is needless to complicate matters by allowing it to be choked and encumbered with dirt. If the skin of an animal be coated with an imper-

vious varnish, death must ensue. A covering of dirt is only less inimical to life. We are not now speaking of dirt such as offends the sense of decency, but of those accumulations of exuded matter with which the skin must become loaded if it is habitually covered and not thoroughly cleansed. The cold bath is *not* a cleansing agent. A man may bathe daily, and use his bath-towel even roughly, but remains as dirty to all practical intents as though he eschewed cleanliness; indeed, the physical evil of dirt is more likely to ensue, because, if wholly neglected, the skin would cast off its excrementitious matter by periodic perspirations with desquamation of the cuticle. Nothing but a frequent washing in water of, at least, equal temperature with the skin and soap can insure a free and healthy surface. The feet require especial care, and it is too much the practice to neglect them. The omission of daily washings with soap, and the wearing of foot-coverings so tight as to compress the blood-vessels and retard the circulation of the blood through the extremities, are the most common causes of cold feet. The remedy is obvious: dress loosely and wash frequently.—*Lancet.*

Black Tongue, or Nigrities.—Dr. Hirtz (*Gaz. Med. de Strasbourg; Journal des Sci. Med.*, 1879, page 582) had occasion to examine a child of six, whose tongue was absolutely black. No other morbid condition existed, excepting a slight gastric disturbance. Washes of every sort were used without effect, but the discoloration of the tongue lasted for six weeks. In another case the parents were sure the child had spilled ink upon its tongue, but the same persistence was observed until lotions of corrosive sublimate were used, which quickly removed the condition. An examination of the literature of this curious affection shows that so far back as 1855 Mr. Bertrand had described it; but it was reserved for M. Gubler (*Dict. Encyclopedique*) to suggest, and for M. Maurice Raynaud (*L'Union Med.*, July 1 and 3, 1869) to prove the existence of a parasite resembling that of ring-worm. Fereol, however, a little later, attempted to show that the parasitic growth was an epiphenomenon, and that the essential disease was a papiliform epithelial hypertrophy. But more recent investigations by Lanceraux and Dessois (1878) appear to prove conclusively the presence of vegetable spores; and the treatment which has proved successful,

namely, scraping and washing with lotions of corrosive sublimate (gr. i to ℥i), seems to point also to a vegetable parasitic origin of the affection.

Observations on the Digestion of Milk.—Under this heading, Dr. E. F. Brush (*New York Medical Journal*, 1879, page 300) gives the result of some experiments which he has made in the digestion of milk and kumyss. Cows' milk, he says, is not so digestible as the milk of mares, etc., because the cow is a cud-chewing animal. In kumyss the caseine is, so to speak, practically regurgitated and chewed; *i. e.*, having been coagulated, it is resubdivided, and incapable of being coagulated under any acid or ferment. An advantage of kumyss in the artificial feeding of children is that the sugar of the milk has been changed into alcohol instead of lactic acid; alcohol, when properly presented, being in reality a hydrocarbonaceous food. Dr. Brush subsisted for a number of days on kumyss exclusively, taking eight bottles a day. During this time his urine, carefully examined, contained no alcohol. Afterward, distilling some kumyss, he drank the distillate, and later discovered alcohol in his urine. This goes to show that alcohol, as contained in kumyss, is destroyed in the system, but the same alcohol, when it has undergone the process of distillation, is eliminated as alcohol.

Infusion of the Stem of the Sunflower as a Remedy in Intermittent Fever.—P. Filatow, of Ssaransk (Government: Pensa; Russia) has for three years frequently used an infusion of the sunflower (*Helianthus annuus* L.) in intermittent fever, and has, in the majority of cases, obtained as good results as could have been obtained from quinine. The infusion is prepared by cutting the *stem* of the sunflower (fresh or dry) into small pieces, and macerating it for three or four days with common cognac, when it acquires the color of sherry, and the distinctive taste of the drug. The dose for adults is a tablespoonful three times a day, and it may be administered before or during the paroxysm. In recent cases recovery took place already after one to three days; in more chronic cases, the medicine had to be given for one week, and occasionally even longer. Only a few cases resisted the remedy entirely, and quinine had to be resorted to; but in several instances even the latter failed to effect a cure.

AMPUTATION AT THE HIP-JOINT; ILIAC ARTERIES COMPRESSED BY LEVER.—At a recent meeting of the Clinical Society of London (*Lancet*, April 26, 1879), Mr. A. Pearce Gould read notes of a case of amputation at the hip-joint, in which the iliac arteries were compressed by Davy's lever. The patient, a man aged twenty-eight, was admitted into Westminster Hospital with advanced disease of the hip. Excision of the head of the femur, which was separated from the neck, was performed, but it became necessary to remove the limb. Mr. Gould did this by prolonging his excision wound downwards a short distance, and then severing the thigh circularly—an oval amputation in fact. He claimed for this method that it considerably lessened the extent of the cut surface, and the uninjured inner part of the thigh was very useful in supporting the posterior flap, and in aiding the nutrition of the flaps. He recommended it especially in cases of amputation following excision. The iliac vessels were controlled by Davy's lever passed into the rectum. There was no flow of blood during the amputation, only that lying in the severed vessels escaping. At the end of the operation the blood in the tray, mixed with serum and sawdust, measured less than three ounces. In comparing Davy's lever with Pancoast's tourniquet, which is usually employed, Mr. Gould held that it had the following advantages; 1. It disturbed the circulation less; 2. It did not interfere with the respiratory movements, nor was it interfered with by them; 3. Its use was not prevented by obesity, rigidity of the abdominal walls, or the existence of abdominal tumors; 4. The pressure required was less; 5. Less liability to injury of viscera and peritoneum; 6. Greater ease and security in application; 7. Greater cheapness and durability; 8. If the lever were not at hand, its place could be more easily supplied. The lever was first suggested and used by Mr. R. Davy, in a young child, in January, 1877; then by Mr. Gould, in December, 1878, and since then by Mr. H. Marsh, Mr. Armstrong, Mr. Davy, and Mr. Cadge, and in every case successful.—*Am. Jour. Medical Sciences.*

A REMARKABLE CAUSE OF EPISTAXIS.—The *British Medical Journal* says: Singular cases occur in medical practice in which the most experienced physicians will find their knowledge and experience fail to furnish the elements of diagnosis. A remarkable example of a case of this kind

is related in the *Journal fur Oeffentliche Gesundheitspflege*, by Dr. Landon, of Elbing. He has been treating for some years a workman suffering from liver complaint, which sometimes improved, but from which his patient had never completely recovered. The patient was from time to time attacked with severe bleeding at the nose, producing great weakness. The bleedings lasted, from time to time, for seven years. At first they were slight, and then they became more severe, and, later on, generally occurred twice a day. Injections of iced water and other means were employed, which gave temporary relief only. At the same time, the patient complained of a sense of pressure in the upper part of the nostril. Suddenly, one day, after a hard sneezing, there escaped from the left nostril what resembled, on superficial examination, a small round worm, which was full of active movement. It was put into water and left for a long time. After the expulsion of the worm the patient improved considerably, the bleeding altogether ceased, and gradually he assumed a healthy aspect. The worm was identified as a young form of the so-called *pentastoma tænioides*. This is an entozoon, which in its states of development inhabits the rectal and nasal apertures of the dog, the wolf, the fox, occasionally the horse, and rarely of man. The early forms live encapsuled in the abdominal and therastic cavities of the herbivorous animals, especially in the liver, where they give rise to considerable destructive changes. After some time, they escape from the capsule, wander about in the body, and again become encapsuled, and, when the encapsuled creature does not die, new ones are produced. When they are hidden in the flesh of the animal in which they live, they find a home in their host, and lie quiet for a time until they are expelled with the nasal mucus. It is not improbable that, from the frequent taste in Germany for uncooked or imperfectly cooked food, these entozoa enter the human system in the living state; and it would appear in this patient that the previous liver affection might be due to the entrance into the liver of the pentastoma in its embryo state, and that it subsequently passed off as the creature became encapsuled.

Transplantation of a Dog's Cornea to the Human Eye. —M. Schoeler relates (*La Revue Medicale*) the case of a

man, aged twenty, one of whose eyes was atrophied, while the other had just lost the entire cornea through its prolonged ulceration. The iris, covered with granulations, was laid entirely bare, the lens had dropped out. The patient had merely luminous sensations. M. Schoeler operated by cutting a large, upper conjunctival flap, capable of covering the whole extent of the cornea; then below, a small flap intended to be united by points of suture to the upper flap that was turned down, the epithelial surface of both flaps being turned back against the surface of the globe. By means of a trephine he removed from the eye of a chloroformed dog a circular portion of the cornea, about nine and a half millimeters in diameter. This cornea being applied to the vacant space in the human eye, he brought down in front of it the large conjunctival flap, which he united by catgut sutures to the small flap. The transplanted cornea was thus held in position and protected by the conjunctival flaps. At the end of three days the sutures fell out, the conjunctival flap was adhering to the transplanted cornea, and the latter to the margin of the sclerotic. There was an anterior chamber visible where the conjunctiva was deficient. But on the following days the cornea gave trouble, and finally became of a milky tint, an ulcer appeared. By degrees vessels found their way into the periphery of the cornea and reached its center. After the sixth week the conjunctival flap was detached. Eight days afterward the cornea was flat, very opaque in the center, but translucid at the periphery so as to let the iris be seen. The vision is, however, very slight; the movement of the hand can be distinguished at a distance of half a foot from the eye.—*Dublin Medical Journal.*

Necrosis Without Suppuration.—William Colles, M.D., in the *Dublin Journal of Medical Sciences* for December, 1878, reports the following case:

"F., aged 15, healthy, was thrown from a carriage and received some bruises on the face; also there was a slight transverse wound, about one-fourth of an inch, at the ulnar side of the left wrist close to the joint. Through this opening projected a small piece of very rough bone, which was considered to be the lower end of the ulna broken off and projecting. It could not be restored or retained in position. Two days later she was put under

the influence of chloroform, but it was still found impossible to restore the natural form of the limb. It was therefore determined to remove the projecting piece. With this view the piece was caught in a forceps, and a director passed behind it. It was found that the latter instrument could be easily passed for a considerable distance in all directions without obstruction from ligamentous or other attachments. On bending the hand backward, and pressing the director inward, there slipped out a portion of bone two inches long. On examining the forearm, the bones seemed quite naturally in their position, but perhaps slightly larger than those of the opposite limb. On examining the bone extruded, it was much smaller than would be expected in a person of her age; it was quite devoid of periosteum; no cartilage or epiphysary end, but a small, rough deposit of new bone; the upper end irregular, jagged, but in no part did it present any appearance of its having been acted on by living parts; and on section—which was difficult, from the dryness and friability of the bone—the medullary cavity was the same as in ordinary section of bones.

"On further inquiry it was found that about eight or ten years ago the patient fell and received what was called a sallyswitch fracture of both bones; this was treated by splints and rest; she recovered with perfect use of the limb, but there was a slight thickening of the bone.

"That this was a case of necrosis there can be no doubt; and if it was the result of injury, it must have been of only two days' duration, which is scarcely possible, for the bone to die, to lose its periosteum, cartilage and epiphysary end, and for a new case to be formed around the dead bone. Hence it was more probably the result of the fracture received so many years ago."

Operating by the Electric Light.—On the 11th inst., Mr. Berkeley Hill operated on vesico-vaginal fistula in University College Hospital while the vagina was lighted up by Mr. Coxeter's application of the glowing platinum wire. The apparatus consisted of a fine wire twisted into a small knot. Through this knot was sent a continuous galvanic current, strong enough to maintain the wire at a white heat. The wire was inclosed in a glass chamber, which was itself also inclosed in another glass cover.

Through the space between the glasses a current of water was allowed to flow, in order to preserve a low temperature round the light. The afternoon, which was dark and foggy, afforded a good opportunity of testing this plan of lighting up deep interiors, and the illumination was completely successful. A strong light was maintained for more than an hour, close to the margin of the fissure, without impeding the manipulations of the operator. A considerable number of spectators assembled to witness the result of the illumination, and were highly pleased. —*London Lancet.*

Treatment of Hemorrhoids.—Dr. Hext M. Perry, West Philadelphia, Pa., in the *Medical Brief*, September, 1879, says that, in the treatment of piles, he gives preference to the use of "Bartlett's Pile Suppositories," manufactured by Messrs. Henry C. Baker & Co., Philadelphia—the manufacturers of "Baker's cod-liver oil and phosphate of lime," etc. He claims that after a long experience with them they give immediate relief.

The next best treatment he has used is that recommended by Dr. Fordyce Barker, of New York, given in his work on *Puerperal Diseases.*

℞. Ungt. gablæ comp. . . . ℥j.
Ext. opii aquæ . . . . ʒj.
Liq. ferri sub-sulphat . . . ℥j.

M. Make ointment. S. Apply to the tumors and well up the rectum twice daily.

In addition, take one of the following pills, night and morning:

℞. Pulv. aloe, Socot.
Sapon, castil . . $\overline{aa}$. ʒj.
Ext. hyoscyam . . . . ʒss.
Pulv. ipecac . . . . gr. j.

M. Make twenty pills.

The Repair of Blood Succeeding Acute Diseases.—M. Hayem made the following conclusions in a paper presented to the Academy of Medicine (*Paris Medical:*) 1. The evolution of blood arrested during the course of an acute disease reappears at the time of defervescence. 2. The rebuilding of blood in hematines is effected by means of a production of hematoblasts. 3. As far as the course of these phenomena is concerned, a distinction must be made between acute lesions of short duration

and rapid defervescence, and those having a slower course and whose defervescence is lingering. At all events, this repair of the blood is analogous to that which succeeds hemorrhages and especially to losses of blood of long duration. As a consequence of the homatoblasts, the blood of convalescents contains for a variable time incompletely developed red corpuscles, which tends to lower the mean quantity of coloring matter in all the red discs. —*St. Louis Medical Journal.*

Surgical Operations During Pregnancy. — W. Cadge, F.R.C., Senior Surgeon to the Norfolk and Norwich Hospital, in the *Lancet* reports a case of recurrent tumor of the breast, for which it became necessary to operate no less than thirteen times, during a period extending from April 13, 1874, to December 20, 1875. She was confined on the 21st of September, 1875, and several of these operations were performed in the latter month of utero-gestation, and one very severe one in the early stage of labor itself, and in every instance without, on the one hand, interfering with the important process of gestation, and on the other, without impeding the recovery from the operation itself. As Sir James Paget pithily says: "It would be mere recklessness to operate on such patients without good cause, yet if good cause for operating exists, they may be treated very hopefully." The patient died in the early part of 1876, from exhaustion.—*Medical and Surgical Reporter.*

Cystic Kidney Removed by Operation.—Dr. Day exhibited, at a late meeting of the Pathological Society of London, this specimen, which had been removed by Mr. Knowsley Thornton from the left side of a girl aged seven years. The patient presented a large, irregular abdominal tumor, the nature of which was doubtful. A swelling had been observed since the girl was two years of age, but she had not suffered from pain or discomfort. Last November an exploratory puncture was made in a part of the tumor between the umbilicus and pubes, where fluctuation was felt. Urinous fluid, which contained albumen, was drawn off to the amount of six pints and a half. The cyst rapidly refilled, and on January 3d it was removed by Mr. Thornton, and found to be connected with the left kidney. The ureter was impervious, so that there was danger of the distended cyst bursting.

Iron Preparations—Effect on the Digestive Process.—Dr. Alfred W. Perry writes in the *Western Lancet:* In cases of debility, prostration, or loss of appetite, preparations of iron, alone or variously combined with bitter tonics, are seemingly indicated clearly, and are very generally used. But in many cases they do harm, either from their being administered at a wrong time or because they are not tolerated under any form or circumstance. The greatest abuse of iron is where it is given for loss of appetite or difficult digestion, and when it is given within half an hour before eating or within three hours after. We have found entirely to our own satisfaction, both by clinical observation and by experiment, that iron preparations introduced into the stomach while digestion is going on either hinder or arrest the process.

Prevention of Infectious Diseases.—*Medical Times and Gazette:* The Board of Health of the Canton of Zurich have just taken an important step with regard to the prevention of infectious diseases. They recently issued an order that every case of such disease, however slight, is to be reported direct to them, and for this purpose they have furnished every medical man in the district with books provided with counter-foils. Sanitary commissions, instituted with this object, will be obliged to send instructions to the medical men when the cases are considered serious, and will prescribe the means of disinfection, isolation of the sick, and other precautionary measures. The results of the information sent by the practitioners will be published every month under the direction of the Board of Health.

A Sad and Suggestive Picture.—"I've been in twenty-four States and have seen a good many physicians," said a well-to-do physician who has made his pile, "and I don't understand why the most of them have such small practices. . . . But I discovered something that surprised me. I visited scores of physicians whose whole library I would have no difficulty in carrying off at once. One leading physician of a certain town did not have a bound book either in his office or house that I saw, only a few pamphlets and journals. Others that I met did not seem to be absorbed in their business. A man can not succeed unless his profession absorbs him."—*Exchange.*

HYPODERMIC SYRINGE AS AN AID TO DIAGONIS.—Dr. David Drummond, Lecturer on Clinical Medicine at the Newcastle-on-Tyne Infirmary, gives details of three cases in which he employed the hypodermic syringe as an aid to diagonis. The first was a case of aneurism, with physical signs of effusion of fluid into the left pleural cavity; the syringe showed there was no fluid, but a solid lung, which led to the conclusion that the left bronchus was pressed upon by the aneurismal sac, and this was afterward verified in the *post-mortem*. In the second case cancer of lung and liver was suspected, and the syringe drew off characteristic cells; and in the third case, it demonstrated pus in the kidney, which was afterward aspirated with good result.—*Dublin Journal of Medical Science.*

SUCCESSFUL NEPHROTOMY.—The left kidney of a child aged seven was successfully extirpated at the Samaritan Hospital, on January 3d, by Mr. Knowsley Thornton (*British Medical Journal.*) The child is now quite well and at a convalescent home at Brighton. The case was admitted under the care of Dr. Day, and Mr. Thornton diagnosed cystic kidney, and advised exploratory antiseptic tapping. Some pints of urine were drawn off. The cyst refilled in the course of a few weeks, and was removed by antiseptic abdominal action.

COLD-WATER PILLOW.—William Woodward, M.D., writes, in the *British Medical Journal:* "In several cases lately I have had recourse to the use of a cold-water pillow, with very marked benefit, where headache, heat of head, and similar symptoms have prevailed. Any one who has experienced the vain attempt to find any permanent cool place in a feather pillow when desired will at once appreciate the above expedient, which, however, may not occur to every one at the required time."—*Louisville Medical News.*

OPERATION FOR PTERYGIUM.—Dr. Yreau Munar (Palma, Majorca,) describes the following method, which has been employed by him with signal success during six years: Firstly, he detaches the pterygium from summit to base; secondly, he folds it back in such a manner that the point touches the middle of the posterior surface of the base, fixing it in this position by means of two or three sutures. The external surface of the pterygium is thus turned toward the eye.

Nerves in the Marrow of Bones.—M. Remy has examined microscopically the marrow of amputated bones, by means of chloride of gold, and claims to have discovered nerves. Some of them contain myeline, and are of small size; others are fibers of Remak. They are very numerous, follow the course of the vessels, and are, in all probability, vaso-motor.—*La Tribune Medicale*, January 1, 1880.

Hiccough.—In order to relieve hiccough, inflate the lungs as fully as possible, and thus press firmly and steadily upon the agitated diaphragm. In a few seconds the spasmodic action of that muscle will cease.

Book Notices.

Sore Throat; Its Nature, Varieties and Treatment, including the Connection between Affections of the Throat and other Diseases. By Prosser James, M. D., Lecturer on Materia Medica and Therapeutics at the London Hospital, etc. Fourth Edition. Illustrated with Hand-colored Plates. 12mo. Pp. 318. Philadelphia: Lindsay & Blakiston. Cincinnati: R. Clarke & Co. Price, $2.25.

How very popular this work is in England is exhibited in the fact that, the third edition having been sold in a little more than three months, it was reprinted for the opening of the last winter session. This reprint, in its turn, having been disposed of before the close of the academical year, the author devoted his vacation for revising it for a fourth edition; and it is a copy of the fourth edition we have before us.

Not a few works have recently been issued in this country on Diseases of the Throat and Air-Passages—several of them of very considerable value—the authors being gentlemen of very considerable eminence in the profession—but we think this work will take a high rank as one devoted exclusively to Affections of the Throat. Says the *British Medical Journal*, than which there is no higher authority: "We can confidently recommend Dr. James' therapeutic teachings as well worthy of the careful consideration of the profession; for they set forth the practice of an enthusiastic worker, whose special experience has been large and lengthened." To the encomi-

ums of the *British Medical Journal*, the *Edinburg Medical Journal*, *Medical Press and Circular*, and other leading journals, we can add our own. After an examination of it, from its first chapter to its close, we feel that we can truly say of it that it is a most valuable addition to the literature of the class of diseases of which it treats, and that it will well repay the careful study of every practising physician.

The work starts out with a preliminary sketch of the whole subject of sore throat, and then the first chapter takes up the consideration of the nature and varieties of the diseases. In chapter second there is a very full and lucid account of the diagnosis of throat affections; and in this chapter the laryngoscope is described, and how to use it fully explained.

But we must refer the reader to the work itself for further information in regard to its treatment of its subject in its twenty-three chapters.

SKIN DISEASES; Including their Definition, Symptoms, Diagnosis, Prognosis, Morbid Anatomy and Treatment. A Manual for Students and Practitioners. By Malcom Morris, Lecturer on Dermatology at St. Mary's Hospital Medical School, etc. With Illustrations. 12mo. Pp. 320. Philadelphia: Henry C. Lea. Cincinnati: R. Clarke & Co.

Probably there are no affections so difficult to diagnose and so troublesome to treat as diseases of the skin. According to our observations the large majority of practitioners of medicine really know nothing about them. When called upon to treat a case they write for an ointment or a wash—usually some astringent preparation—and send the patient off as soon as possible.

To physicians who would like to know something about skin diseases, so that when a patient presents himself for relief they can make a correct diagnosis, and prescribe a rational treatment, we will unhesitatingly recommend this little work of Mr. Morris. The affections of the skin are described in a terse, lucid manner, and their several characteristics so plainly set forth that diagnosis will be found easy. The treatment given in each case is such as the experience of the most eminent dermatologists advise.

We hope that the publication of the work in this country will advance the knowledge of dermatology here.

EDITORIAL.

OUR readers will notice that we have gotten out two numbers of the NEWS this month. We have now *caught up*, and hope to keep so.

AN OFFER.—Before the year 1880 closes we wish to double, if not quadruple, the circulation of the MEDICAL NEWS. In order to do it we have determined to make some very liberal offers. Although the financial condition of the country is much better than it has been, yet very many physicians have a pretty hard time to meet all necessary expenses of living and indulge in current literature. Having a knowledge of this fact we have concluded to make use of it in accomplishing our wish; and, with it subserved, we will at the same time be aiding those who are somewhat straitened in their finances.

The intelligent wives and daughters of many physicians very naturally desire them to subscribe for some good monthly magazine, as *Harper's Monthly, Lippincott's Magazine, Appleton's Journal, Scribner's Magazine, Harper's Weekly, Atlantic Monthly.* It is not unfrequently the case that a physician, with a large family and poorly paying patrons, finds it quite a tax to take one of these literary journals for his family, and at the same time take a medical journal. He wishes his family gratified, but he feels he ought to take a medical journal. Medicine is a progressive science, and how can a doctor keep himself abreast of advancing progress unless he is a reader of the current medical literature? He can not. Without subscribing for a journal that will keep him informed of recent discoveries in his profession, he can not fulfill the requirements which the law demands of a physician; *i. e.*, to be informed of all the most approved modes of treating the various diseases at the time he is called to treat any of them.

Now, to afford every physician an opportunity to take both a medical journal and one of the popular magazines of the day for his family, and at the same time to largely increase our circulation, we make the following offer: To any one *who is not now* a subscriber for the MEDICAL NEWS, and who will send us the price for a year, and fifty cents, of the *Atlantic Monthly, Appleton's Journal, Scribner's*

Magazine, *Lippincott's Magazine*, *Popular Science Monthly*, or *Harper's Magazine*, we will send them the journal designated and the MEDICAL NEWS, for a year, for the amount sent. To *old subscribers* of the MEDICAL NEWS we will send either one of the journals mentioned at a dollar off of the subscription price.

Here is an offer that will enable a physician to secure a first-class medical journal, of nearly a thousand pages in a volume, for the trifling sum of fifty cents. We can not promise back numbers.

Again, to any one sending us the name of a new subscriber, and two dollars, or to the *new subscriber* himself, we will send by mail, Dr. Flint's Manual of Auscultation and Percussion—certainly the best work printed on the subject.

SONS OF TEMPERANCE.—THEIR OBJECTS AND PRINCIPLES.—During the past few years much has been said and written about effective temperance efforts and organizations—able to reclaim the inebriate and throw around them the strong arm of protection, and at the same time have the power to save the young from the snares of the tempter; and as the success of reformatory movements depends upon organization and united effort, and as individuals are better able to resist temptation by being brought within a circle of fraternal love and sympathy, attention is called to the advantages of the Order of the Sons of Temperance.

This organization was instituted in the city of New York, September 29, 1842, to supplement, solidify and perpetuate the results of the Washingtonian Reformation. For thirty-eight years the Order has been working diligently and increasing in numbers and power. It is now composed of a National Division, fifty-seven Grand Divisions, and nearly three thousand Subordinate Divisions, embracing every State and nearly every Territory of the Union—also, Canada, Great Britain, and the Islands of both the Atlantic and the Pacific Oceans, and it has enrolled more than three millions of persons. Its fundamental principle is total abstinence from all intoxicating drinks. It presents a fraternal combination to meet and overcome the social allurements of intemperance and the combined influence of the liquor traffic. Its beautiful and instructive ritual, filled with the spirit of love and self-

sacrifice for the welfare of others, appeals to the highest faculties of human nature. The plain and simple constitution, practical code of laws, sound financial basis, co-operation, sympathy, and union with the moral and Christian elements of the country, are making it one of the most powerful agencies against intemperance and the liquor traffic in the world. The growing temperance sentiment of the country necessitates permanent organization, in order that the good accomplished by the Murphy Movement and previous efforts may be perpetuated. The experience, moral, numerical and pecuniary strength of the Sons of Temperance offers every advantage necessary to satisfy the requirements of such an organization. Its membership is composed of the best class of persons of both sexes, old and young, who are actuated by a common purpose of reclaiming the fallen and throwing around them an influence calculated to benefit them morally, socially and intellectually.

The Order aims to educate the children in the principles of total abstinence, through organizations of the Cadets of Temperance, superintended and managed by the Divisions, and create a wide-spread public sentiment in favor of total abstinence, and to support and aid in carrying forward ALL movements designed to suppress the vice of intemperance. Not only does it aim to reform and save the drunkard, but also seeks to throw safeguards around the innocent, which shall prevent them from becoming victims to the vice of intemperance.

All who desire to share the privileges and benefits of such an organization, and to earnestly labor for the advancement of the temperance cause, are invited to join. Charters and general information may be obtained from E. J. Morris, Grand Scribe, 8 and 10 West Third Street, Cincinnati, O.

POPULATION OF AFRICA.—Accurate statistics of the population of Africa, and especially of the interior portions of the continent, are, of course, not yet obtainable, and it will probably be many years before several of the populous districts now known will be sufficiently accessible for a thorough census; but much important information has been gathered about the distribution of the inhabitants and the density of the population in the different parts of the country. In the region of the great lakes,

for example, there are countries as thickly populated as many of the States of Europe—relatively small areas, which, according to Stanley, possess millions of inhabitants. Behna states that the negro regions are by far the most populous, while the desert parts represent the other extreme. M. A. Rabaud, in a paper published in the "Bulletin of the Marseilles Geographical Society," gives the following as the population of the different sub-divisions of the continent: In the Soudan, the population is estimated at 80.000,000, or about fifty-three per square mile; the town of Bida, on the Niger, contains 80,000 inhabitants. The population of East Africa is estimated at 30,000,000, and that of Equatorial Africa at about 40,000,000. One of the latest authorities divides the population as follows among the great families into which ethnologists have separated the people: Negroes, 130,000,000; Hamites, 20,000,000; Bantus, 13,000,000; Foolahs, 8,000,000; Nubians, 1,500,000; Hottentots, 50,000. This would give a total population of 172,550,000. These figures are, of course, only approximate, and both German and English geographers think them too low, the former estimating the population at 200,000,000.

Mr. Bergh, the irrepressible President of the Society for the Prevention of Cruelty to Animals, has had introduced into the Legislature a bill, making vivisection under any circumstances a misdemeanor; accompanying it with a memorial which sets forth, among other things, that "divers learned and scientific (but misguided) medical men have perverted the meaning and intention" of the act passed in 1867, which provides that the laws previously made for the prevention of the infliction of unnecessary suffering upon the brute creation shall not be construed to prohibit or interfere with any properly conducted scientific experiments or investigations, which shall be performed only under the authority of the faculty of some regularly incorporated medical college of the State. The memorial goes on to say that these learned and scientific, but misguided, medical men, "under the pretense of demonstrating to medical students certain physical phenomena connected with the functions of life, are constantly and habitually in the practice of cutting up alive, torturing and tormenting divers of the unoffending brute creation to illustrate their theories and lectures, but with

out any practical or beneficial result either to themselves or to the students; which practice is demoralizing to both, and engenders in the future medical practitioners a want of humanity and sympathy for physical pain and suffering, which will greatly deteriorate their influence in their future professional life." It then makes the refreshing statement that "this matter of vivisecting animals for so-called scientific purposes has been the subject of discussion and *universal condemnation* by the more eminent members of the medical profession in Europe," and finally calls upon the Legislature to "wholly suppress this barbarous and unjustifiable sacrifice of animal life and infliction of unnecessary physical pain, suffering and death upon the brute creation."

In commenting on the above, one of the daily papers very sensibly remarks that Mr. Bergh will gain nothing in his crusade against vivisection by thus misrepresenting the case, and that the statute of 1867, which he cites in his memorial, is a very discreet and well-considered enactment; providing all reasonable safeguards against the abuse of vivisection, as it does, without forbidding its legitimate use. The value of vivisection, it continues, is a question for experts, and there is no reason to believe, nor does Mr. Bergh make any effort to show, that it is resorted to when the same end might be gained by other means. In other words, there is no reason why the law should be altered.

Atavism With a Vengeance.

We recently had occasion to comment on the exhibition furnished the public, free of expense, by a certain *soi-disant* asylum superintendent and expert on insanity, in the Redemeir murder case. We now take pleasure in introducing to our readers a writer who makes his mark in the columns of our esteemed contemporary, the New York *Medical Record*. In its issue of December 20, 1879, we find a "Lecture on Insanity," delivered under the auspices of the politicians of the New York Board of Charities and Correction, which, with all its gross errors, its crude and undigested compilations, is published without a word of comment. The "lecturer," Dr. A. E. Macdonald, after stating that there is a return "toward the appear-

ance and form of other animals" in some forms of insanity, claims that there is an "equally perceptible return in habit and in action," and then follows this delicious morsel: "I have read of a case where a woman lived and acted like a sheep, and ate grass; and I know of a case where a young man has all the habits, and *a good deal of the appearance*, of a well conducted horse. He harnesses himself to a wagon every morning and trots about all day, switching a tail which he has fabricated out of an old rope, and *so great is his consistency that he never fails to shy at a wheelbarrow.*"

The alienist staff of our esteemed contemporary seems to us to require a little remodeling—rearrangement, readjustment, as it were—if we are to judge of it by this specimen. The notion that the imitative tendencies of dementia, which are familiar to every tyro in mental pathology, are anything but manifestations of weak-mindedness could only enter the head of one affected in the same way. Just as the "enlightened alienist" quoted derives these cases from a reversion to the instincts of the lower animals, so he might have stated, with the same logic, that the patient whom we once saw in an asylum, who worked one leg and hissed all day, stating that he was a steam-engine, was a case of reversion to a steam-engine, exhibiting a "return in habit and action" to that apparatus! Dr. A. E. Macdonald proves too much even for the most furious of radical Darwinists. The latter would be satisfied with proving the descent of man from the monkey stock, but this "superintendent and expert" derives him from the horse and sheep simultaneously, and, at the same time, must, of course, trace his ancestry to inanimate objects like a teakettle or a steam-engine.

A little further on, the "learned doctor" exhibits an imbecile with hare-lip and atrophied testicle, adding, "like other imbeciles, he was probably born with as good a brain as other children." The question here mainly turns on what he means by "other children." If such children are meant as develop into superintendents who derive man from an equine or ovine ancestry, we have no doubt whatever that the statement is true that imbeciles *are* born with "as good a brain!"—*St. Louis Clinical Recorder.*

NEWSPAPER LAWS.—We call the special attention of postmasters and subscribers to the following synopsis of the newspaper laws:

1. A postmaster is required to give notice *by letter* (returning a paper does not answer the law) when a subscriber does not take his paper out of the office, and state the reasons for its not being taken. Any neglect to do so makes the postmaster *responsible* to the publishers for payment.

2. Any person who takes a paper from the post-office, whether directed to his name or another, or whether he has subscribed or not, is responsible for the pay.

3. If a person orders his paper discontinued, he must pay all arrearages, or the publisher may continue to send it until payment is made, and collect the whole amount, *whether it be taken from the office or not.* There can be no legal discontinuance until the payment is made.

4. If the subscriber orders his paper to be stopped at a certain time, and the publisher continues to send, the subscriber is bound to pay for it *if he takes it out of the post-office.* The law proceeds upon the ground that a man must pay for what he uses.

5. The courts have decided that refusing to take a newspaper and periodicals from the post-office, or removing and leaving them uncalled-for, is *prima facie* evidence of intentional fraud.

OBITUARY.—Dr. Jas. B. Davis was born in Owen County, Ky., March, 1850, and died of typho-malarial fever August 17, 1878, at the residence of M. J. Rouse, in Pendleton County, Ky. He was educated at Owen College. He graduated at the Cincinnati Medical College in the spring of 1876, and began the practice of his profession at the place of his death. Dr. Davis was very proud of his profession and very attentive to his business, and was slowly but surely gaining a good practice. He was warm in his friendship, but slow to form acquaintances; but when friends once made were friends for life. He was a consistent member of the regular Baptist Church, and died in the faith of a Christian. He said he had rather stay and do good, but if it was the Lord's will he was willing to go. He died in full faith of a blest immortality, mourned and regretted by all that knew him best.

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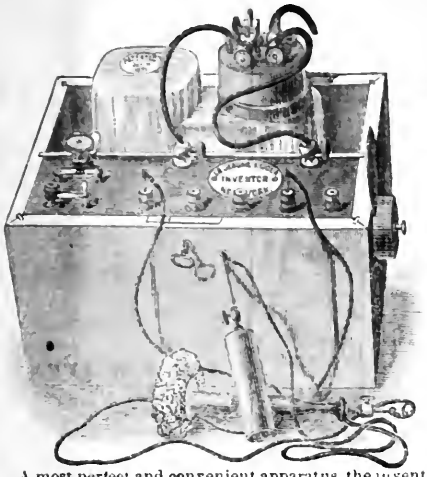

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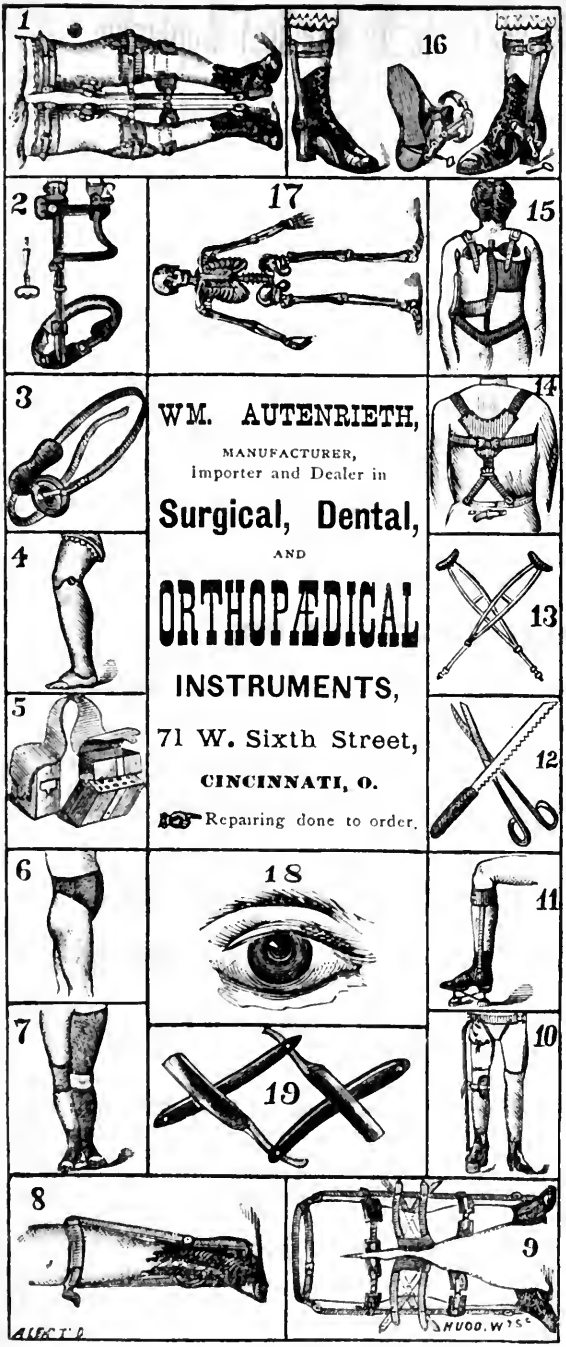

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Report from Bellevue Hospital, New York.

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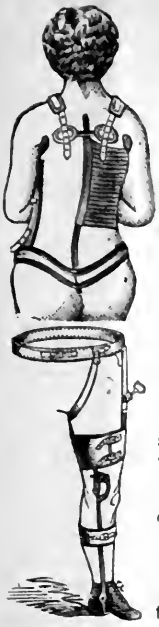

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THE REGULAR SESSION will begin on Wednesday, October 1, 1879, and end about the 1st of March, 1880. During this Session, in addition to four didactic lectures on every week-day except Saturday, two or three hours are daily allotted to clinical instruction.

THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins on the 1st of March and continues until the 1st of June. During this Session, daily recitations in all the departments are held by a corps of examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

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Professor of Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ill.

Louisville, *December* 7, 1878.

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In comparing the above analysis with that of the Extract of Malt of the German Pharmacopœia, as given by Hagar, that has been so generally received by the profession, I find it to substantially agree with that article.

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S. WESLEY CHAMBERS, M.D., Resident Physician, City Hospital.

BALTIMORE, MD., Jan. 20th, 1879.

We take pleasure in saying in behalf of your preparations of Maltine, that they have fully come up to the measure of your representations. They have given us the greatest satisfaction. We have used them extensively to the great benefit of our patients.

DAVID STREETT, M D., Resident Physician, Maternite Hospital.

LOUISVILLE, KY., July 11th, 1879.

I am using Maltine with Pepsin and Pancreatine in my family, and am exceedingly pleased with its results. Professor Flint, of your city, whom I highly esteem, has been consulted about the case and knows the solicitude I have had about it. The above preparation in Sherry, after meals, has been productive of great benefit. I am using it in the City Marine Hospital, the Kentucky Infirmary for Women and Children, and in my private practice, and am much pleased with the results obtained.

T. P. SATTERWHITE, M.D.

JACKSON, MICH., October, 1878.

In its superiority to the Extract of Malt prepared from Barley alone, I consider Maltine to be all that is claimed for it, and prize it as a very valuable addition to the list of tonic and nutritive agents.

C. H. LEWIS, M.D.

ST CHARLES, MINN., March 23rd, 1879.

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J. SHEPHERD FLETCHER, M.D., M.R.C.S.

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Professor of Chemistry and Toxicology, Bellevue Hospital Medical College; Professor of Chemistry and Physics, College of the City of New York.

New York, April 17th, 1879.

I have visited the works at Cresskill, on the Hudson, where Maltine is prepared, and spent portions of two days in witnessing the chemical processes for making the same. I was particularly impressed with the thorough cleanliness observed, as well as with the completeness of the apparatus employed for accomplishing the desired result—from the first treatment of the grains, to the concentration of the liquid product by evaporation in vacuo. The operation is effective in extracting the whole of the nutritive constituents of the grains of malted Barley, Wheat and Oats, with but a slight residue, and is the most complete method yet devised, with which I am acquainted, for accomplishing this object.

Maltine is superior in therapeutic and nutritive value to any Extract of Malt made from Barley alone, or to any other preparation of any one variety of grain. From a chemical and medical standpoint, I can not commend too highly to my professional brethren this unique and compact variety of vegetable diet and remedial agent, nutritive to every tissue of the body, from bone to brain.

Respectfully, R. OGDEN DOREMUS.

By Prof. John Attfield, F.C.S.

Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain; Author of a Manual of General Medical and Pharmaceutical Chemistry.

London, 17 Bloomsbury Square, W. C.
October 28th, 1878.

To Messrs. Reed & Carnrick:

Gentlemen:—I have analyzed the extract of malted Wheat, malted Oats and malted Barley, which you term Maltine. I have also prepared, myself, some extract from these three malted cereals, and have similarly analyzed it, and may state at once that it corresponds in every respect with the Maltine made by myself. As regards the various Malt Extracts in the market, I may remark that your Maltine belongs to the non-alcoholic class, and is far richer, not only in the directly nutritious materials, but in the farina digesting Diastase. In comparison, your Maltine is about ten times as valuable, as a flesh former; from five to ten times as valuable, as a heat producer; and at least five times as valuable, as a starch digesting agent. It contains, unimpaired and in a highly concentrated form, the whole of the valuable materials which it is possible to extract from either malted Wheat, malted Oats or malted Barley.

Yours faithfully, JOHN ATTFIELD.

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DR. E. R. DOUGLASS."

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DR. I. C. BARLOTT."

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"I am well pleased with the CINCHO-QUININE, and think it is a better preparation than the sulphate. W. H. HALBERT."

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